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ABSTRACT

The book contains the proceedings of the Second International Seminar on Vocational Rehabilitation for Mentally Retarded Persons, held in 1976. The latest advances in the field are discussed by representatives from 25 foreign countries who are actively involved in rehabilitation research or who work in areas closely related as investigators, administrators, or trainers of rehabilitation workers. Topics discussed include the conduct of research, innovative programming emphasizing the normalization concept. training of personnel, and the evaluation and assessment of programs. (Author/DLS)

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Proceedings of the Second International Seminar on VOCATIONAL REHABILITATION FOR MENTALLY RETARDED PERSONS

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Abstract

This publication contains papers presented and recommendations formulated at the Second International Seminar on Vocational Rehabilitation for Mentally Retarded Persons held August 8-29, 1976, in the United States. The latest advances in the field were discussed by representatives from 25 foreign countries who are actively involved in rehabilitation research or who work in areas closely related as investigators, administrators, or trainers of rehabilitation workers. Topics discussed included the conduct of research, innovative programming emphasizing the normalization concept, training of personnel, and the evaluation and assessment of programs. The Seminar itinerary included meetings and field visits in three locations: Philadelphia, Pennsylvania; Birmingham, Alabama; and Washington, D.C. This publication and the Seminar were supported by a grant from the Rehabilitation Services Administration, Office of Human Development, U.S. Department of Health, Education and Welfare, and were sponsored by the American Association on Mental Deficiency in cooperation with the Rehabilitation Services Administration.

Acknowledgments

George Soloyanis

Primary acknowledgments must be to Dr. James Garrett, Executive Director for Research and Evaluation; Dr. Joseph Fenton, Chief, Special Centers Division, and Dr. Martin McCavitt, Special Assistant for International Affairs, of the Rehabilitation Services Administration, for conceiving, planning, and funding the First International Seminar on Vocational Rehabilitation for Mentally Retarded Persons, and for honoring the American Association on Mental Deficiency by asking us to host and conduct the Second.

Many thanks are due to the participants who returned to the Second Seminar, to the new participants, for their willingness to share information about their programs, to critique us and to be critiqued in turn.

Particular thanks are due to Stanley Meyer, Deputy Secretary for Mental Retardation, Commonwealth of Pennsylvania, to Peter Polloni, Executive Director, Pennsylvania Association for Retarded Citizens, Dr. Gerald Clark, President, The Elwyn Institute, and Dr. Ralph Pacinelli, Director, Regional Office, RSA, for opening their programs and organizations to the participants, and for much shared staff time. We were able to present to our participants a most unique combination of state, federal, and private, and of professional and voluntary efforts directed towards the vocational rehabilitation of retarded persons.

Much valued assistance was volunteered in the development of the Recommendations by Dr. John McKenna who served as Chairman of the Evaluation and Recommendations Committee, and by Dr. Edward Whelan, Dr. Emanuel Chigier, and Father Gregorio Finol, who were Chairmen, respectively, of the phases in Philadelphia, Birmingham, and Washington. This Committee received invaluable help from Dr. Andrew Lorincz and Mrs. Pamela Samuels, as well as from Dr. Orville Karan, Waisman Center on Mental Retardation and Human Development, Madison, Wisconsin.

I cannot overthank the many AAMD staff members who undertook major responsibilities for the success of the Seminar. I recognize their efforts as voluntary and motivated, for the Seminar came to us during a season of unprecedented activity for the American Association on Mental Deficiency.

My deepest appreciation is reserved for Dr. Elaine K. Hollander who gave beyond our contracted arrangement, and whose enthusiasm and energy held the Seminar together. She provided guidance to all of us, proved innovative in helping to conceptualize the program, and who very skillfully enabled all of us to communicate and achieve more than we expected.

Preface

An enlightened perception of mentally retarded persons has brought about a revolution in the care, treatment, education, programming rehabilitation and life style of the handicapped. Although research and the professional establishment have contributed to this change, the primary energy has come from the advocacy of parent and other citizen movements with the reinforcement of precedent-setting judicial events affecting every forward-looking program. The impact on rehabilitation has been twofold. In the first effect, many previously unserved persons are now being offered opportunities to receive training and education. Secondly, rehabilitation professionals are paying more attention to the context in which their programs are conducted and are extending their responsibilities into longer follow-up periods.

"Normalization" philosophy, after influencing many aspects of the way society thinks about the proper place for retarded persons, has spawned and revitalized such processes as deinstitutionalization, group homes, community living, early intervention, individual treatment plans, rights to education, civil rights, sexual education, sheltered workshops, equal wages, access to employment, and many more. These are clearly rehabilitation issues, and although we are at a very early stage of how best to implement "normalization" philosophy, it is gratifying to know that experimentation and implementation with such programs is an international fact. Various nations are at different stages of developing and evaluating such programs; thus an exchange of the "state of the art" was thought to be of mutual benefit.

In 1971, recognizing the urgent need to disseminate and share knowledge regarding the development of vocational rehabilitation techniques in programs for the mentally retarded, the Rehabilitation Services Administration awarded a grant to the American Association on Mental Deficiency for the sponsorship of an International Research Seminar on Vocational Rehabilitation for Mentally Retarded Persons. This conference enabled participants to share relevant research results, to compare program structures and progress in different parts of the world, and to identify areas requiring further investigation. As they became aware of the importance of this exchange for mentally retarded individuals all over the world, the participants emphatically requested an opportunity for continuing international dialogue. Another grant was awarded by the Rehabilitation Services Administration for this second, follow-up conference.

The purpose of the Seminar was to exchange the latest advances in vocational rehabilitation of the mentally retarded, especially as related to innovative programming to maintain in or return to the community, mentally retarded individuals. Methods to prepare mentally retarded individuals and members of the community for "normalization" programs were stressed in the presentations. Thus, based on the combined expertise of the international participants, recommendations could be made concerning the development of community-related rehabilitation programs such as group homes and other living arrangements, employment opportunities, legal rights, early intervention, family rehabilitation, and other aspects of programs, following the "normalization" principle.

Hosting the Fourth International Congress of the International Association for the Scientific Study of Mental Deficiency (IASSMD) in Washington, D.C., in August, 1976, provided AAMD and RSA an ideal occasion to combine the sponsorship of a follow-up international research seminar on vocational rehabilitation of retarded persons. Twenty-seven individuals from foreign countries were nominated to participate in the Seminar by AAMD and RSA in cooperation with the International Society for the Rehabilitation of the Disabled, the International Labor Office, National Association for Retarded Citizens, Partners of the Americas, the President's Committee on Employment of the Handicapped, the Centre for Social Development and Humanitarian Affairs, and the World Health Organization. This resulted in inviting representatives with research and vocational rehabilitation experience from: Argentina, Canada, Colombia, Costa Rica, Denmark, Egypt, England, France, Germany, Greece, India, Ireland, Israel, Jamaica, Kenya, Mexico, Norway, Peru, Poland, Spain, Sweden, Tunisia, Venezuela, and Yugoslavia.

Criteria for the selection of Seminar participants were that the participants:

1. be actively involved in rehabilitation research for the mentally retarded or working in areas closely related, either as investigators, administrators, or trainers of rehabilitation workers;
2. be in a position to implement the knowledge from the meeting upon return to the home country;
3. have a commitment to attend and participate full-time in the conference and be present at all times;
4. have a thorough working knowledge of English, both spoken and written;
5. prepare a paper on a specific area of his/her own research or area of employment as related to the vocational rehabilitation of the mentally retarded.

The goals of the Seminar were:

1. for scientists and practitioners in mental retardation to share relevant research results in specific problem areas with professionals responsible for developing, administering, and supervising deinstitutionalization of mentally retarded citizens and vocational rehabilitation services for mentally retarded persons;
2. to investigate existing research programs and services and then assist participants to organize aspects applicable to their individual settings:
3. to organize a program structure, including seminars and working sessions, which would provide practical experience and would develop an operational understanding

leading to improved delivery of vocational rehabilitation services to the mentally retarded;

4. to expand and sharpen the participants' philosophy of vocational rehabilitation in order to assist them in applying their practical understanding, on both a short-range and a long-range basis, to the solution of life problems of mentally retarded individuals;

5. to report additional findings in the research projects which were continued after being discussed at the seminar five years earlier; and

6. to develop proceedings, publications and other training materials that will be useful to practitioners in the field of mental retardation.

The Seminar was held in three cities: Philadelphia, Pennsylvania; Birmingham, Alabama; and Washington, D.C. (See Appendix II, Seminar Program.) The cities were selected because they offered exemplary rehabilitation research and development programs to be visited, as well as special expertise available in the selected topics. Papers relating to their own special field of research were presented by foreign and domestic participants at each of the three locations. The final phase of the Seminar, which took place in Washington, D.C., preceded the Fourth International Congress of the International Association for the Scientific Study of Mental Deficiency (IASSMD), and therefore enabled Seminar participants the opportunity to attend the Congress. In addition, selected Seminar participants were able to disseminate their research findings to a wider audience. The Vocational Rehabilitation Session was a major session of the Congress and was translated into three languages.

The Seminar itself provided an opportunity for first-hand familiarity with actual programs in a more intimate working relationship. The format encouraged the active involvement of all who attended. There were formal presentations, summarizers and evaluators, rotating chairmanships and group discussions. Field visits to selected, relevant rehabilitation facilities were scheduled. Participants also were asked to record their impressions and write brief evaluations of the presentations and site visits.

The following program topics were selected on the basis of general interest and importance:

1. Vocational rehabilitation services to the severely and profoundly retarded and the multipli-handicapped, including discussion of manpower, training skills and materials, time and resources, program effectiveness measures, support services and job placement.

2. Independent living activities, including discussion of support services, adjustment centers, problems of preparing and maintaining the client, and gaining community acceptance.

3. Special problems including sex education, family planning, patterns of living arrangements, personal budgeting and transportation.

4. Program effectiveness, evaluation and accountability.

Participants in the Seminar fully acknowledged that many aspects of the problems inherent in the "normalization" process were experienced at first hand. The development of the Seminar recommendations have identified emerging philosophies and the directions toward which programs for mentally retarded persons through the world should and will move in the future.

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Evaluation and Recommendations of the Second International Seminar on Vocational Rehabilitation for Mentally Retarded Persons

Introduction

The participants in the Second International Seminar on Vocational Rehabilitation for Mentally Retarded Persons acknowledge with gratitude the help we have received from the Rehabilitation Services Administration, Office of Human Development, United States Department of Health, Education and Welfare; and the American Association on Mental Deficiency.

As advocates of the cause of mentally retarded citizens, we feel that this Seminar will do much to strengthen the common bond among those affected by the problems of mental handicap throughout the world.

Our hosts have encouraged us to make recommendations which will be useful to practitioners in the field of mental retardation and we offer the following suggestions in the spirit which inspired the participants of the Seminar — a spirit of constructive appraisal.

While we hope that our recommendations are valid and relevant, we recognize that they can only be provisional and account must be taken of the cultural context where they may be implemented.

The participants in the Seminar are in accord that the target population of retarded persons served by vocational rehabilitation includes all levels of retardation, including the most severely involved non-communicative, non-ambulatory, multiply-handicapped individuals, who may never achieve economically productive careers.

Similarly we are in accord with the projected goal of rehabilitation for mentally retarded individuals which is normalization. By normalization of handicapped persons it is understood that their way of life shall differ as little as possible from that of the non-handicapped. In other words, the handicapped person shall live a life which is as normal and integrated as possible.

This is an urgent need to develop more opportunities for consumer involvement and participation in decisions about their individual vocational futures. Just as we have tended to underestimate the potential of the handicapped for work, we have likewise tended to neglect their capacity for meaningful interventions in the shaping of their own lives.

The participants in the Seminar do not make fine distinctions between habilitation and rehabilitation. It is clearly understood that early intervention attempts at the habilitation of the mentally retarded are most likely to prevent secondary problems requiring rehabilitation efforts. Also understood is that primary prevention of mental retardation eliminates the need for vocational rehabilitation.

Listening to our colleagues from other lands has heightened our perception of the problems facing those dealing with the assessment, care, education, and vocational rehabilitation of mentally retarded citizens. While the magnitude of the problem may not, at times, engender a great sense of optimism, the advances which have been made recently in the United States of America and which we have been privileged to observe in the past three weeks will be a source of inspiration and hope for all of us. We feel that our shared experience has expanded our philosophy of vocational rehabilitation and we hope that the new ideas which we have absorbed will be the springs of actions, helping us to initiate similar advances in our own countries.

The sincere attempts to work toward a more dignified and satisfying life for mentally retarded persons which we have witnessed in the United States of America in the past three weeks have been helped, we feel, by focusing attention on certain key issues which we now propose to consider in some detail.

Legislation

The Declaration of Rights of Mentally Retarded Persons was adopted by the United Nations in 1971. The members of the Seminar, without exception, agree that this is a specific example of the application of human rights and that impressive steps have been taken in many countries towards the realization of these rights. It has become more apparent that the first essential steps in procuring the rights of mentally retarded citizens is through legislation.

One of the most comprehensive legal documents which exemplifies this first step is the compilation of the United States of America Rehabilitation and Development Disabilities Legislation (Public Law 93-112, P.L. 93-516, P.L. 88-164, and P.L. 94-103). It is encouraging to witness the zeal which this has inspired in many professionals and in families whose common goal is the improvement of opportunities for mentally retarded persons.

We feel, however, that without encouragement and guidance, declarations of rights without the intention to implement them, or even with the best intentions but without the skills of implementation, will accomplish little for mentally retarded citizens. Subsequent litigation may be a necessary follow-up to ensure implementation.

We recommend that the following specific steps should be taken to help mentally retarded people in all our countries to gain from our shared experience:

1. The rights of the mentally retarded shall be secured by legislation which designates a responsible local authority and outlines the procedures for monitoring of the services and programs.

2. International governmental agencies (UNESCO, WHO, ILO) should be required to follow the Declaration of Rights by a detailed analysis of the extent to which these rights are being implemented in member states and applied for the benefit of handicapped persons in every country.

3. International non-governmental agencies, including the International League of Societies for the Mentally Handicapped (ILSMH), International Association for the Scientific Study of Mental Deficiency (IASSMD), Rehabilitation International, etc., should be invited to monitor programs and services and to advise on the details of such analyses.

4. National societies should be helped to examine the feasibility of models being transferred from one system to another and to see how far legislation, successfully implemented in one country, may be promoted in other countries. This should be effected by a data bank set up by one of the specialist organizations of the United Nations or any other appropriate international organization.

5. While the United Nations should be required to ensure that mandatory laws to procure the rights of mentally retarded persons will be enacted in all member states, voluntary non-governmental agencies should accept it as an obligation to press for enabling legislation in all countries to ensure that programs for handicapped persons will have parity with those which are appropriate for ordinary citizens.

6. We also recommend that the above mentioned Rehabilitation and Developmental Disabilities legislation be circulated to all national societies concerned with mentally handicapped citizens throughout the world.

7. We recommend that all legislation regarding the mentally retarded be broadly transmitted to parents and consumer groups so that they may promote its application.

8. Legislation which is designed to protect the mentally retarded may sometimes have a negative effect, such as maintaining an adult retarded person in a perpetual child-like status. It is advisable that all laws be reviewed and amended, if necessary, so that rights of mentally retarded are *not* restricted.

9. Every government department dealing with handicapped persons should be required to set up advisory boards composed of parents and professionals who would monitor professional practice ethics, undertaking such tasks as ensuring the confidentiality and proper disposal of records of mentally retarded persons. We recommend a policy which includes a percentage of clients (consumers) on all such advisory boards.

Funding

Concern for the protection of handicapped persons is highlighted by the growth of voluntary societies and of advocacy, by the development of techniques for monitoring improvement in facilities and by the general acceptance of the principle that our obligations to the handicapped are fulfilled only by delivery of services appropriate to their needs. The realization of these ideals is often hampered by lack of funds, by inertia, and by self-interest.

In the course of the past three weeks, we have had frequent demonstrations of the advantages of community-based programs over institutions. It is apparent that such community programs contribute more to the personality development and well-being of mentally retarded persons than do institutionally-based programs. We are assured that in the long term such community programs will be much more economical and although the case for this been partially demonstrated, we feel the need for additional evidence which would accelerate the acceptance of mentally retarded persons in community-based programs.

We make the following recommendations:

1. Cost effectiveness studies of the advantages of community-based programs and long-term service delivery for mentally retarded citizens must form an integral part of planning for regional service systems.

2. Since modes of funding and availability of funds must vary from region to region and from country to country, we cannot make any specific recommendations which would be universally applicable. We feel, however, that the principle of equity should apply and that funds should be made available not only for the basic minimal needs but also adequate financial assistance to support normative living in the mentally retarded citizen's own community.

3. Funds should be set aside for higher education, universities and community agencies to support training and research programs for personnel and to initiate planning and development programs.

4. Funding should be utilized to prevent the need for institutionalization, to encourage community-based facilities, and to facilitate the return of mentally handicapped persons from institutional to community care programs.

5. To encourage international cooperation and to aid regional planning and programming around the world, funds should be made available to international organizations and agencies. Such funds should secure at least basic support staff salaries and administrative overheads and should be paid through international organizations and agencies. This would ensure that more time would be given to work towards the primary objectives of improving the lot of mentally retarded persons and their families, and less time taken up by fund-raising, at present so necessary to support agency activities.

Family Involvement

More comprehensive community-based service delivery systems are evolving; however, the extent to which the family can contribute to the development of retarded persons has not yet been fully developed. Attitudes which stemmed directly from the "incurable illness" model of mental retardation still persist. It must be stressed that with appropriate care, training, and education of mentally retarded individuals, attainment of normative or near normative state of functioning is possible.

All service delivery systems should recognize the important role of the family in promoting and sustaining developmental processes in the retarded member of the family.

Families with appropriate guidance and help may be in the best position to utilize the individual's spontaneous mental development and to maintain programs of systematic stimulation for growth and development.

Resources are needed to initiate programs which will increase the family's competency in dealing with all the problems of mental retardation. The following proposals would do much to implement such a policy:

1. The creation of new professional roles, e.g., an early child care worker with an educational/social work/nursing orientation competent in the evaluation, support, and education of parents with handicapped children.

2. The improvement of teacher training programs to include a greater working knowledge of handicaps and methods of dealing with the problems of handicapped pupils and their families.

3. A more balanced partnership between parents and professional people in assuming responsibility for their children's future and in public advocacy roles.

4. Work with families of mentally retarded persons to form an integral part of training of all those professional people who come in contact with mentally retarded persons.

5. The funding and setting up of family resource programs with a view to helping families in times of crises, such as illness, bereavement, and transportation problems.

6. The family's need for rest and recreation should not be overlooked in order to sustain the family's desire to keep the mentally retarded individual in the community.

7. Families wishing to create a trusteeship as an agency to care for the mentally retarded family member should be assisted by the establishment of a follow-through guardianship system.

Assessment

Assessment and training of mentally retarded persons can no longer be regarded as two separate processes but as

essentially inter-related activities. A number of difficulties may be traced to the separation of these concepts. For example, "assessment" has frequently been carried out for the purpose of selection (or screening out) of individuals who are being considered for training. A predictive function has been given to such testing — even though research has shown predictions to have much less reliability than hitherto supposed. There has been the emergence of specialists in testing: psychologists and more recently psychometrists, with access to tests which others, such as teachers, are unable to use. The design of many tests leads the tester to focus more on what the testee *cannot* do than on what he/she can do. The time spent in administering certain tests is not warranted in light of the inadequacy of educational and training programs subsequently available.

We believe that many of these difficulties may be resolved by an affirmation that the best way of assessing a person's ability to perform a task is by trying to teach him to do it. A more balanced use of testing is necessary, that is, less time spent testing and more time teaching. We recommend:

1. Models which stress the nature of a deficit and seek to remediate it should be replaced by the (re)habilitative model which seeks to discover also the individual's assets in order to build on them. This change in emphasis, widely evidenced in the U.S.A., is more likely to lead to the development of individualized programs of training and to challenge assumptions which have been traditionally made about individuals carrying a common diagnostic label.

2. Most of the offensive labels once used to classify mentally retarded individuals have been discarded. Nevertheless, unprecise terminology detrimental to the chances of mentally retarded individuals is still in common use. We feel that professionals should exercise their minds in finding an improved classification system which would stress the potential of mentally retarded individuals rather than serve as an excuse for inaction (e.g. ineducable, untrainable).

3. A select, annotated bibliography should be produced by one of the specialist organizations of the United Nations or any other appropriate international organization concerning those assessment techniques which have achieved recognition in the field of vocational rehabilitation of the mentally retarded and which are both widely used and culturally valid in the context in which they are used.

4. Funds should be made available for the standardization of tests and for the training of people in assessment techniques, particularly in developing countries.

5. By assessment we imply continuous *re*assessment of the client in terms of social skills, vocational skills, etc. Assessment, which is often conducted by professionals, should serve as an opportunity for dialogue with the client and also should serve as a link to other professionals providing care to the retarded individual.

6. Results of assessment should be adequately transmitted to both the client and his family.

7. Informed consent for assessment should be obtained.

Manpower Development and Utilization

Because of the ever-widening spectrum of services to mentally retarded individuals and their families, and because of the changing patterns of service delivery dictated by the normalization-integration principle (e.g., from the custodial institution to community-based services), attention to manpower development and utilization is vitally important. Future services depend on an increasing supply of appropriately trained and skilled personnel to fill staff and related positions. Manpower needs will *not* always be met by relying exclusively on persons trained and credentialed in traditional human service professions. A more rational approach to manpower development will also place increasing emphasis on the contributions of other appropriately qualified and trained personnel, both employed and volunteer, who can make major contributions to the habilitation and rehabilitation of mentally retarded persons.

One approach to this area which is gaining increasing attention on an international level and which is being studied by the International League of Societies for the Mentally Handicapped (ILSMH) is the four-level Manpower Model developed in Canada by the National Institute of Mental Retardation (NIMR). Other approaches to meeting manpower needs which merit study are the utilization of short-term "in-service" types of staff training and retraining, and the adoption of competence-based systems of training.

It is recognized that remarkable achievements can result from the efforts of a well trained, enthusiastic and committed staff even when facilities available may be less than satisfactory. We would therefore recommend that:

1. Where limited resources exist, priority should be given to staff training and development — a policy of investing in people.

2. Recognizing that many of those classified as retarded may need assistance throughout their lives, attempts should be made to improve the coordination of all services dealing with mentally retarded persons. To this end, we recommend that agencies at national and local levels should be established to plan and coordinate services for mentally retarded persons and their families at early stimulation pre-school, school, pre-vocational and vocational training levels. Staff training schemes for all personnel engaged in the field of mental retardation should be a structured element in any program of change.

Evaluation of Service Quality: Accountability and Self-Renewal

Human services in general, and mental retardation services in particular, have always been oriented toward evaluation and the measurement of outcomes and results. However, much of what has gone on in the past under the name of "evaluation" has tended to make the "quantifiable important rather than the important quantifiable." In recent years this situation has changed as a result of increasing client and consumer input into service planning and operation, demands for greater programmatic and fiscal accountability by service consumers and by funders, and the development of new approaches and tools for evaluating service programs and entire systems.

The members of the Seminar believe that services to mentally retarded people can be made more accountable and can be elevated to increasingly higher levels of service quality through a systematic, ongoing and rigorous approach to program evaluation. With respect to the evaluation of mental retardation services, we would make the following recommendations:

1. That evaluation be both *internal* (conducted by staff and people involved in the program) and *external* (conducted by outside consultants and experts).

2. That evaluation be *multi-level*, i.e., different means and methods of evaluation be utilized to assess:

a. client progress,

b. staff performance,

c. operation of the total program, and

d. functioning of the overall organization or system (in a multi-component agency or system).

3. That accountability be judged in both fiscal and programmatic terms:

a. fiscal — cost-benefit ratios, etc.

b. programmatic — adherence to up-to-date human management principles such as normalization-integration

and to various systems for program analysis, standards for accreditation, etc.

4. That programs allocate human (staff time) and financial resources (5-10% of yearly operating budget) to carry out such evaluation.

A second and related aspect is *self-renewal*. This is another key to adaptive service delivery and quality assurance. The members of the Seminar recommend attention to this area and the adoption by services of means and mechanisms which will promote internal communication, self-criticism, non-defensiveness, innovation and an inner-orientation to increased flexibility.

Pre-Vocational and Vocational Training Programs

Recognition should be accorded to the substantial evidence available from both research and practice that mentally retarded adults of all ages and levels of retardation are able to benefit from opportunities to improve and develop their abilities, provided that they are given systematic and structured help to enable them to reach a level of skill. The absence of such opportunities for personal development of work skills on the other hand leads to apathy and under-expectation which in turn produces under-achievement.

As society becomes more industrialized, changing concepts should be reflected in the vocational rehabilitation programs provided for mentally retarded individuals. Work should be a way for the mentally retarded to feel useful in society — to be contributing members, not just to "get paid." Work must have a meaningful purpose and provide intrinsic satisfaction.

A key aspect of developing as a successful worker and a productive member of society is to also develop skills necessary to be a totally functionally individual. This means that all of the social skills, e.g. dressing, toileting, communication, social interaction, mobility and travel skills, money and banking skills, use of leisure time, and survival skills should be an integral part of the training program.

For many individuals who are being trained and those who are being deinstitutionalized and entering the delivery system for the first time there may be skills that are needed for the world of work in a sheltered or vocational shop. The activities and program in a pre-vocational component should be of a nature to prepare the individual in these vital skills.

Work can take place in a variety of settings including comprehensive training centers, specific work experience groups, sheltered work groups, seasonal/temporary periods of employment, trial periods of employment, on-job training in industry, innovative training centers such as one specializing in horticulture, and/or permanent employment.

It should also be considered that if a workshop model is being developed, the workshop should be not only for the retarded but may serve individuals with a variety of handicaps and normal individuals. It should also provide a variety of work experiences so that the workers can experience choice and a degree of responsibility. We therefore recommend that:

1. The administration of work programs should be governed by rehabilitation that is client oriented rather than by administrative convenience.

2. Staff should be recruited from a variety of occupations, both of professional and vocational orientations. It is essential that the workshop manager be a team leader, exploring individual staff interests and skills to provide staff with every opportunity to apply their skills to their work.

3. The concept of normalization will differ in those countries where job opportunities are plentiful and the work ethic prevails from those developing where job opportunities are few. Even in highly industrialized countries, the pace of change is so rapid and technological progress is transforming normal work patterns in such radical ways that what is normal now will have changed within the next decade. Plans for mentally retarded people must reflect similar patterns of change. We recommend that the normalization principle be reviewed so as to adapt it to developing countries when appropriate.

4. In countries where the pace of industry is rapid and where technological progress is transforming normal work patterns, a system should be developed to review the job markets available on a timely basis to evaluate which jobs would be suitable for the mentally retarded.

5. A frequently neglected area of vocational rehabilitation of the mentally retarded is recognition of the need for pre-vocational training. Needed is directed research to develop further structured objectively measurable criteria for facilitating reasonable success for on-the-job vocational training. Utilization of extant special education and behavioral shaping techniques that are responsibly monitored and have appropriate consumer input should facilitate this development.

6. Employment of mentally retarded persons should be preceded by vocational training and preparation for community living within the educational services common to all others.

7. Follow-up services or "outcome evaluations" should be an integral part of vocational rehabilitation programs.

Attitudes and Change Effectors

Although there has been considerable attention and progress with regard to improving vocational and social skills of the mentally retarded, the fact remains that without compensatory attention to the reaction of society at the community level, the rehabilitation and integration of the retarded will not be successfully achieved or maintained. It is recommended therefore that more work must be done in the area of attitudes and behavior and that experts in the field of communication, sociology, and behavioral change be mobilized to that end as part of an interdisciplinary team. We recommend the following specific steps:

1. A basic comprehensive review of all literature with regard to attitudes to the retarded (including an analysis of the implications of such research) should be carried out and widely published.

2. A study of the impact of movies and other mass communication approaches should be carried out. Strategies for better use of the communication media so as to create a better image of the retarded and his abilities need to be worked out.

3. Demonstration projects of a long-term nature, based on a socio-psychological approach in the community should be carried out. This should also include studies of possible conflicting images created in the minds of people by communications delivered by charitable fund-raising organizations as compared to rehabilitation-oriented agencies.

4. Further work (basic applied research) is called for, with regard to the relationship between attitudes and behavior, placing greater emphasis on behavioral change as compared to attitudinal change as far as the social and professional public is concerned.

5. National and international societies should be conscious of the impact their organizational names have on community attitudes. Many of the names of these organizations and societies reflect a philosophy based on pity or an unconscious deprecation of the mentally retarded clients being served.

6. Efforts should be concentrated on improving the self-concept of the mentally retarded individual so that his enhanced self-image can influence the public image.

Research

Research, broadly defined as designing an activity to provide an answer to a question, establishes that the aims of research in the field of vocational rehabilitation of the mentally retarded are:

1. research in prevention methodologies,
2. research in early diagnosis and intervention, and
3. research in service delivery.

We recognize that in the achievement of these aims, universities will play an important part. At the same time we realize that research, teaching, and manpower development in the field of mental handicap cannot take place divorced from service delivery. This sometimes raises questions as to whether service delivery should take place in institutions which are primarily oriented to research and teaching or should research and development of personnel take place in service systems. We agree that research and training cannot take place in the absence of practical experience and interaction with mentally handicapped persons.

It is possible that there may be dangers associated with the placement of mentally handicapped persons in locations which are not primarily designed to meet their needs, but, since practical experience and interaction with mentally handicapped persons are essential in the formation of professional personnel, we make the following recommendations:

1. Where research and training programs are closely associated with service delivery systems for the handicapped, objective evaluative procedures should be set up to ensure that the needs of the consumers are carefully considered and always assume primacy.

2. Research and training programs should take place within the service systems as well as in the universities. The "laboratory" for field action research should be as normative as possible rather than in an artificially created situation.

3. Time should be set apart for researchers to develop effective strategies for implementation. Trained researchers should be encouraged to utilize practitioners.

There appear to be five important stages in this:

a. There should be research carried out that is relevant to practice, e.g., in areas where practitioners report problems.

b. The research findings should be communicated to practitioners in clear, precise and unambiguous language.

c. Research workers should demonstrate the applications of results to practitioners in the natural field setting.

d. Practitioners should be given a chance to try these methods out for themselves, under guidance of the researchers.

e. Research workers should collaborate with practitioners and those with administrative responsibility for the service(s) concerned in devising ways of ensuring that fruitful applications are built into long-term practice. This means that thorough evaluation of the applications, and their feasibility of continuation after the research team have left, must be demonstrated by the research team.

Introduction and Orientation to the Seminar

Elaine K. Hollander

Purpose of the Seminar

The purpose of the Seminar was to dialogue on the latest advances in vocational rehabilitation of the mentally retarded, especially as related to innovative programming to maintain in or return to the community, mentally retarded individuals. Methods to prepare mentally retarded individuals and members of the community for normalization programs were stressed in the presentations. Thus, based on the combined expertise of the international participants, recommendations were made concerning the development of community rehabilitation programs, group homes and other living arrangements, employment opportunities, legal rights, early intervention, family rehabilitation, and other aspects of programs, following the normalization principle.

The goals of the Seminar were as follows:

1. for scientists and practitioners in mental retardation to share relevant research results in specific problem areas with professionals responsible for developing, administering, and supervising deinstitutionalization of mentally retarded citizens and vocational rehabilitation services for the mentally retarded. Special emphasis was on community living, evaluation for employment, and employment opportunities for the mentally retarded;

2. to investigate existing research programs and services and then assist participants to organize aspects applicable to their individual settings;

3. to organize a program structure, including seminars and working sessions, which would provide practical experience and would develop an operational understanding leading to improved delivery of vocational rehabilitation services to the mentally retarded;

4. to expand and sharpen the participants' philosophy of vocational rehabilitation in order to assist them in applying their practical understanding, on both a short-range and a long-range basis, to the solution of life problems of mentally retarded individuals;

5. to report additional findings in the research projects which were continued after being discussed at the seminar five years earlier; and

6. to develop proceedings, publications and other training materials that will be useful to practitioners in the field of mental retardation.

Planning Committee

Numerous individuals and organizations cooperated in planning for the Seminar, contributing their ideas, experience, and wise counsel. The planning group from the Rehabilitation Services Administration included: Dr. Joseph Fenton, Chief, Special Centers, who served as the Seminar Project Officer; Dr. Martin McCavitt, Special Assistant for International Affairs; and Dr. Ralph Pacinelli, Director, Philadelphia Regional Office. From A.A.M.D., Dr. George Soloyanis, Executive Director, served as the Seminar Di-

rector; Dr. Elaine K. Hollander, Seminar Coordinator; Ms. Ellen Horn who assisted in writing the initial proposal; and Mr. John Loth, Jr., whose experience as coordinator of the First International Seminar was invaluable.

The Philadelphia phase of the Seminar was hosted by Elwyn Institute. Dr. Marvin S. Kivitz served as Planning Committee Chairman and Mr. Peter Dakunchak as Vice Chairman. The following served on the Philadelphia Planning Committee: Mrs. Edythe Ballard, Mental Retardation Administrator, Philadelphia Office of Mental Health and Mental Retardation; Mr. L. Steuart Brown, Executive Director, Delaware ARC; Mr. Peter Dakunchak, Vocational Counselor, Elwyn Institute; Mrs. Dorothy Fulton, Chief, Division of Vocational Habilitation, Pennsylvania Department of Public Welfare; Dr. Marvin S. Kivitz, Vice President for Programs, Elwyn Institute; Mr. Peter Polloni, Executive Director, Pennsylvania ARC; Mr. Tony Renzi, Bureau of Vocational Rehabilitation, Regional Office; and Mrs. Pamela Samuels, Department of Public Welfare, Southeast Region.

The Birmingham phase of the Seminar was hosted by the Center for Developmental and Learning Disorders, University of Alabama in Birmingham. Dr. Andrew E. Lorincz, Director for the Center, served as Host Coordinator and assisted in developing the Birmingham phase.

Members of the AAMD staff whose cooperation is gratefully acknowledged are Ms. Tina Dolan and Mrs. Jane Adams.

The Seminar staff included the Seminar Director: George Soloyanis, Ph.D., Dr. P.H., Executive Director, AAMD; Seminar Coordinator: Elaine K. Hollander, Ph.D., Professor, University of the District of Columbia, Washington, D.C.; and Seminar Secretary: Ms. Dorothy Anderson.

Program Development and Itinerary

In August 1976, the American Association on Mental Deficiency (AAMD) hosted the Fourth International Congress of the International Association for the Scientific Study of Mental Deficiency (IASSMD) in Washington, D.C. The event provided an ideal occasion to combine the sponsorship of a follow-up international research seminar on vocational rehabilitation of the retarded with the sponsorship of the individuals attending the Seminar. By scheduling the Seminar to precede the Congress of the IASSMD, an excellent opportunity arose for the international exchange of new knowledge, research results and philosophy, among scientists in the field of vocational rehabilitation of the retarded.

During the week of the IASSMD Congress, sessions were devoted to presentations concerning research in the field of vocational rehabilitation. These sessions provided the opportunity for the selected participants to disseminate their research findings widely in important areas of recent discoveries such as early childhood stimulation and family rehabilitation, group homes, community adjustment, evaluation for employment, employment opportunities, etc. As a major session of the Congress, the Vocational Rehabilitation Session was translated into three languages. In addition, the procedings of the Congress are published and available to researchers all over the world. The Seminar, preceding the Congress, provided an opportunity for first-hand familiarity with actual programs in a more intimate working relationship which would facilitate the identification of program strengths and weaknesses and areas in which future activities might be planned. International collaboration thus would be further reinforced with particular benefits to American mental retardation program planning efforts through the contribution of foreign experts.

The following program topics were selected on the basis of general interest and importance:

1. Vocational rehabilitation services to the severely and profoundly retarded and the multiply-handicapped, including discussion of manpower, training skills and materials, time and resources, program effectiveness measures, support services, and job placement.

2. Independent living activities, including discussion of support services, adjustment centers, problems of preparing and maintaining the client, and gaining community acceptance.

3. Special problems, including sex education, family planning, patterns of living arrangements, personal budgeting and transportation.

4. Program effectiveness, evaluation, and accountability.

Papers relating to their own special field of research were presented by the foreign and domestic participants at each of three locations: Philadelphia, Pennsylvania; Birmingham, Alabama; and Washington, D.C. The participants also had the opportunity to take part in the Fourth International Congress of the International Association for the Scientific Study of Mental Deficiency in Washington, D.C. Topics relating to the overall goals of the Seminar were selected and listed under the Washington, D.C. phase of the program.

The Seminar format encouraged the active involvement of all who attended. There were formal presentations, summarizers and evaluators, rotating chairmanships, and group discussions. Field visits to selected, relevant rehabilitation facilities were scheduled. Participants also were asked to record their impressions and write brief evaluations of the presentations and site visits.

The cities selected for the meetings offered exemplary rehabilitation research and development programs to be visited, as well as special expertise available in the selected topics.

Selection of Participants

Overseas. Twenty-seven individuals from foreign countries were nominated by international organizations and the Rehabilitation Services Administration to participate in the Seminar. Special appreciation is given to the following national and international agencies for their cooperation: International Society for the Rehabilitation of the Disabled, the International Labor Office, National Association for Retarded Citizens, Partners of the Americas, the President's Committee on Employment of the Handicapped, the Centre for Social Development and Humanitarian Affairs, and the World Health Organization.

Representatives with vocational rehabilitation experience were invited, from the following countries: Argentina, Canada, Colombia, Costa Rica, Denmark, Egypt, England, France, Germany, Greece, India, Ireland, Israel, Jamaica, Kenya, Mexico, Norway, Peru, Poland, Spain, Sweden, Tunisia, Venezuela, and Yugoslavia.

Criteria for the selection of Seminar participants were that the participants:

1. be actively involved in rehabilitation research for the mentally retarded or working in areas closely related, either as investigators, administrators, or trainers of rehabilitation workers;

2. be in a position to implement the knowledge from the meeting upon return to the home country; participants must not enter the United States on an immigrant visa;

3. have a commitment to attend and participate full-time in the conference and be present at all times;

4. have a thorough working knowledge of English, both spoken and written. Since every participant will be expected to make either a principal address, be a discussant, or serve as one of the rotating chairpersons, he or she will have to be in a position to respond quickly in discussion and communicate readily; and

5. prepare a paper on a specific area of his/her own research or area of employment as related to the vocational rehabilitation of the mentally retarded. This paper will be presented during the course of the Seminar or in conjunction with the International Congress, and may be included as part of the proceedings.

United States. Major contributors to the Seminar deliberations included directors and staff of research and demonstration projects supported by the Rehabilitation Services Administration, government experts (federal and state), university staff, and representatives of voluntary rehabilitation facilities and national rehabilitation organizations.

Publication of the Proceedings

Invitations to the participants were extended with the understanding that each participant prepare a formal paper for delivery during the Seminar. This paper would become part of a publication which would bring together the findings of the Seminar.

Greetings

Milton J. Shapp
Governor
Commonwealth of Pennsylvania

As Governor of the Commonwealth of Pennsylvania, I am especially pleased to extend my warm personal greetings to each of you attending the Second International Seminar on Vocational Rehabilitation of the Mentally Retarded sponsored by the American Association for Mental Deficiency and the United States Department of Health, Education, and Welfare.

It is indeed gratifying to see such a distinguished assemblage of professionals gathered together to discuss and share different methods and techniques of developing and utilizing the enormous potential of the mentally deficient individual.

For too long, mental retardation or mental deficiency carried a stigma for all those involved, including the individual and the family. Fortunately, an enlightened attitude is breaking down barriers, and we are now beginning to tap this rich resource of beautiful, productive people.

Through efforts and endeavors such as those of this Seminar, many mentally deficient citizens across the United States will be given the opportunity to lead fuller and more rewarding lives. It is my fervent hope that additional measures will be taken to bring these individuals into the mainstream of life.

On behalf of all Pennsylvanians, I wish to express my best wishes for a most successful and informative Seminar.

Remarks

Wilbur E. Hobbs
Deputy Secretary, Southeast Region
Pennsylvania Department of Public Welfare

Thank you for this second opportunity to speak to you. I want to briefly describe how the Department of Public Welfare in the Commonwealth of Pennsylvania is approaching the delivery of services to the mentally retarded.

The Commonwealth subscribes to the principle of "normalization" which has emerged within the last decade. Normalization means that retarded citizens have the right to learn, to work, to earn, to play, to love, to vote, even to take risks — that like all persons, they deserve a chance to fully develop within their capacities, to learn to speak, eat, dress, and participate in activities typical of those their own age — in other words to live as normally as possible.

The normalization process is dependent on how the person, who is labeled "at variance" with what we see as "normal," is perceived. In Pennsylvania, we are moving forward in our programs for the mentally deficient to a position of emphasis of the person's strengths rather than his deficiencies — to both trust and test this capacity to learn, to mingle or integrate with others. We have moved significantly towards a position in which the mentally retarded is individualized based again on his capacities, where we will risk his dispersal from an institutional style care to another more intimate residential setting.

Concurrent with the processes of normalization is the Department of Public Welfare's intent to "humanize." Any of us who have visited the large public institutions of the past react with disbelief that a society which is built on humanizing principles, and which has the resources to make

these principles a reality, will tolerate the manner in which some groups of citizens have been dehumanized in settings which have so many inadequacies.

Our departmental thrust to normalize and humanize and individualize is twofold: First, we face the problem of how to change institutional settings which, as previously indicated are no longer consistent with departmental goals. Although we are finding that the vast majority of mentally retarded people do not need the intensive care offered through institutions, for those who do, the Department is emphasizing the development of individual assessment of needs and personalized treatment programs. Through funding under Act 75A, effective December 1974, a Medical Assessment Project for state schools was conducted. This survey established guidelines for the evaluation of each resident's ability to care for his or her own personal needs and to function in an independent manner. Not only medical information, but tools such as genetic counselling, occupational and physical therapy, and speech and hearing examinations were used to determine individual needs and appropriate treatment to meet those needs.

Secondly, we are moving to deinstitutionalize, that is, to disperse residents from existing state schools to other smaller and more individualized residential settings, and we are offering a network of services to sustain the mentally retarded not yet institutionalized in family-style living in the community.

In brief, for the more than 360,000 retarded citizens in Pennsylvania, the Department's major goal is to strengthen and expand supportive services in the community to enable every mentally retarded person to live as independently as he or she is able and to avoid institutionalization.

This has been no easy task. While normalization, humanization, and individualization are simplistic concepts, easily understood by most, we find that the translation of these principles into programs is fraught with feelings of fright, resistance and misunderstanding. We have come to new commitments with respect for the need for supporting our directions with orientation for parents, and families, staff at all levels, community, and so on.

The large institution represents a position of strength and control. Dispersal or decentralized services have been viewed by some families and staff as fragmentation with loss of control. Eventually we see the systematizing of community based services as constituting the means by which confidence in the "strength and control" of the total network of services can be restored. The first level of confidence must be in the capability of the retarded citizen to function in the "normal" community. We are making exciting and significant progress in terms of the regionalization and dispersal of services in this state, where for many years the institution has in fact been the focal point for services to the mentally retarded.

Before highlighting some of the specific efforts which we see as significant, let me inject that, as Deputy Secretary for the Department of Welfare's Southeast Region, I represent the Commonwealth's overall thrust to decentralize administration of governmental services. Regionalization of administration has been in process in the last decade concurrent with the service directions which I have described; and this has been a facilitating management change by government in this state.

Sustaining the mentally retarded in the community requires a wide array of coordinated support systems in addition to the diversity of residential care facilities. I want to briefly describe some specific service areas which are moving us in the directions noted.

First are the services which we refer to as Community-Living Arrangements. Pennsylvania's Community-Living Arrangements program is the largest such program in the nation. Of the 2300 or so persons presently in the program, approximately one-half of them were residents of state institutions who are now functioning as independent and semi-dependent members of communities. In this southeast region nearly 500 children, adolescents and adults are living in group homes, in apartments and with foster families. Wherever they live they are a part of, not apart from, the community.

The Family Resource Services program is another significant support system. More than 95% of all mentally retarded persons live in their own homes or in a community setting. To provide help in these settings the Department initiated this program in 1973 — families can obtain temporary care for a retarded member during illness, family crises, or for a few hours so that the family can keep medical appointments, shop, etc. Other services include recreation, homemaker services, transportation, in-home therapy and parent training. During the past year about 31,000 families received help through this program.

Early Intervention is another service area. As you know, mental retardation can be minimized by providing care and treatment for a retarded child at the earliest possible time. Pennsylvania provided individually developed training programs to about 500 children from birth to school entry age through its 24 early intervention projects last year. Cognitive, motor, sensory, self-care, language and personal-social skills for the child, and family training methods and techniques are developed.

I want to mention Vocational Services. Through Vocational Services, mentally retarded people receive job training and are assisted in finding employment in business and industry, or in sheltered workshops in the community. More than 6,000 mentally retarded persons participated in this program last year. Currently, more than 2,000 persons are receiving training through this program in this region. Within the next few years, we plan 22 more programs.

Our Woodhaven Center is a unique combination of a state facility and an educational institution. The combined efforts of the Department of Welfare and Temple University are providing an innovative approach to intensive, short-term programming with firm plans for return to the home community.

And finally, we continue to look at the whole person by coordinating all parts of our state services. Child Welfare, Youth Services, Mental Health, Mental Retardation and other offices are focusing together on clients. The emphasis is on becoming less self-serving and more client-serving. Defense of fiefdoms and territories is giving way to strong efforts and advocacy on behalf of those who need our help. To paraphrase the Poet Robert Frost, we have miles to go and so we cannot rest. This is a stimulating era in which to carry some responsibility for care and support systems for the mentally deficient. Our efforts will be strengthened by support from other professionals, by public understanding, and by a political climate which sees wisdom and profit in full opportunity for all citizens.

It is good that you are here. We can learn from each other.

Ralph N. Pacinelli
Director, Office of Rehabilitation Services
Department of Health, Education and Welfare
Region III, Philadelphia

I am delighted to be here and to welcome you on behalf of the Department's Regional Rehabilitation Family, including Mr. Gorham L. Black, Jr., the Regional HEW Director, and Mr. William A. Crunk, the Assistant Regional Director for Human Development.

This Second International Seminar on Vocational Rehabilitation for Mentally Retarded Persons rekindles some fond memories for me, in that, I was fortunate enough to serve as the Project Director of a similar RSA-sponsored program in 1971, the year of your first conference. I am somewhat envious of Dr. Hollander's role with this Conference; and I have already assured her that indelible memories will be etched in the next 22 days — memories that will serve as great comfort when she is harassed by an exceptionally heavy academic workload, or an unreasonably demanding department chairperson or dean, or students who prefer trivia to substance.

We feel privileged that Philadelphia was selected as the location for the opening of this Seminar. This area is indeed blessed with a wide variety of rehabilitation resources. There are exemplary service delivery systems, quality services, innovative training and meaningful research activities operating in the greater Philadelphia area. The dialogue that you establish here should carry with it a lasting quality.

Characteristics of Region III

The Vocational Rehabilitation program within the Department of HEW is essentially decentralized. Both program authority and funds are administered by the Regional Offices, of which there are 10 across the country. Region III comprises five states (Delaware, Maryland, Virginia, West Virginia and Pennsylvania) and the District of Columbia. Some 23,000,000 people live within these boundaries. Approximately 300,000 are in the vocational rehabilitation caseload, of which the mentally handicapped constitute the largest categorical disability group. Slightly more than 100,000,000 federal dollars are active presently in state agencies, rehabilitation facilities, voluntary organizations and universities — all provided through the Rehabilitation Act of 1973. Of course, other federal human services legislation provides additional resources. During the year ending June 30, 1976, the state agencies in Region III successfully rehabilitated 46,000 handicapped individuals.

Essential Characteristics of the State/Federal Vocational Rehabilitation Program

The public program of vocational rehabilitation in this country is a state-federal partnership. Through federal grants-in-aid, the states carry out the primary mission of the RSA Legislative mandate which can be succinctly stated, "To stimulate, develop and implement programs which provide services for the disabled in maximizing their potential for a full and, to the extent possible, a productive life." The focus of the program is unmistakably vocational and the expected outcome of services rendered is employment.

I cannot impress upon you too strongly the pivotal role of the state vocational rehabilitation agency in our service delivery system. The "Feds" will be quick to acknowledge that the action is in the states. Therefore, the RSA presence in the community is through a wide variety of agencies and organizations that receive grants and contracts authorized by the Rehabilitation Act. I am quick to admit, however, that we like to feel that our national and regional planning exercises serve to stimulate activities at the cutting edge, and that we serve effectively in the role of monitor, evaluator, communicator, consultant, trainer and action-researcher.

Progress Since the First Conference

There are several important developments in our program that have occurred since your meeting in 1971. At that time, great emphasis was placed on the "rehabilitation facilities services" provisions of the Act and how they influenced the delivery of services to the mentally retarded. Those provisions are still very much in place and the outlook for financial support is very promising. But, the new 1973 Rehabilitation Act contains a thrust that I think you will find encouraging. It redirected the program toward serving first the most severely handicapped and it gave an even greater role to the handicapped person for molding and shaping not only his own rehabilitation plan, but also the program of the state vocational rehabilitation agency. Some of these new provisions are:

1. The Individualized Written Rehabilitation Program (IWRP). In addition to the longstanding requirement of client participation in plan development, the IWRP Provision requires that a copy of the written plan be given to the client so that he can monitor his progress toward goal achievement.

2. Policy development consultation. The state or agency is required to seek the input of handicapped individuals, providers of services and other interested parties in the development of program policies. If this requirement is not met, the smooth flow of federal funds to the state could be jeopardized.

3. Client Assistance Projects (CAP). In addition to the traditional fair hearings and appeals procedures, CAP projects offer an alternative for clients who are dissatisfied with the Rehabilitation Agency or the services being rendered. It is the rehabilitation correlate of the ombudsman role.

4. Services to Family Members. Recognizing the importance of the family in the rehabilitation of the handicapped individual, it is now lawful to provide services to family members when they are essential to the disabled person's vocational rehabilitation.

In some of the countries represented here today, these advances are already commonplace. It is possible that your 1971 discussion contributed to their enactment in this country.

Importance of Research Dissemination and Utilization

Too much of what we have learned over the past 20 years through the RSA Research and Demonstration Grant Program is lying on library shelves collecting dust; and there are many reasons for this state of affairs. Among them, is the

level at which we choose to communicate our findings. Too often, researchers are accused of writing for only other researchers. Journal articles and seminar presentations "freeze out" the practitioner. This type of situation leaves the researcher robbed of what answers are needed to improve rehabilitation practice at the point of delivery, and it perpetuates the *status quo* in the treatment process.

You have a very special opportunity during the next few weeks to tell it like it is, to question those who tend to be evasive and too abstract when they write, to identify the workable and discard the insubstantial, and to document the record for those who could not participate in this enriching experience. They will share in the fruits of your labor through the publication that will follow.

I want to comment briefly on the agenda for this seminar. AAMD can be justifiably proud of the workplan established for the Second International Seminar. From my vantage point in the region, it is consistent with the programmatic mission of RSA, and it addresses the research program's strategy of improved dissemination and utilization of project findings. It is particularly laudable that the agenda makes effective use of all rehabilitation resources in this community, including public and private agencies and organizations, rehabilitation facilities and universities. I join with my colleagues in RSA in extending appreciation for AAMD's leadership and service in putting this Seminar together. And, to Dr. Hollander, a special thanks for skillful program development and dedication above and beyond that required of the typical Seminar. And to each of you, we shall be grateful for the knowledge and experience that you share here, and we trust that your participation in this Seminar will enhance our future rehabilitation endeavors.

PART I

Changing Concepts And Attitudes

Training for All Mentally Retarded Adolescents: Planning for a Changed Attitude

Lennart Wessman

Abstract. Results of a primary Activities for Daily Living (ADL)-training program begun in 1968 for the severely and profoundly retarded are discussed in the context of a plan to provide pedagogical stimuli for all mentally retarded persons in Sweden. Normalization and integration are the basic principles used in planning services for the mentally retarded, first for the slightly handicapped, and now for the severely retarded. Problems experienced in the training of the severely retarded resulting from the confusion of housing, education and medical care functions in institutions are summarized. Non-institutional normalization emphasizing "pupil first" is seen as the only possible solution.

During recent years interest in the mentally retarded has in the main focused on two problems: (a) normalization and integration and, (b) educating the mentally retarded who used to be considered non-educable. This paper deals mainly with the severely and profoundly retarded. I will also discuss how important the normalization principle is when we plan services for the mentally retarded. Most of what I am going to say relates to experiences in developing the school system for the retarded in Sweden, but also stems from discussions with colleagues abroad.

By normalization of handicapped persons we usually mean that their way of life shall differ as little as possible from that of the non-handicapped. In other words, the handicapped person shall live a life which is as normal as possible. The normalization principle, developed by Bengt Nirje (1969), is the normal 24-hour rhythm, normal experiences, normal way of living, eating, dressing, etc. In principle, normalization, according to Nirje, can be applied to an institution. But there are no examples of successful normalization at institutions.

The integration of the handicapped simply means cooperation. The National Swedish Board of Education (SO) has (in 1975) described the integration of handicapped pupils and developed the concept of integration. We distinguish between facility integration, functional integration, and administrative integration.

The aim of facility integration is to abolish boarding schools and other institutions. School facilities for the mentally retarded are instead organized inside or closely connected to usual schools. For those children who cannot live at home, small boarding units are arranged in ordinary housing areas, in villas, semidetached houses or flats.

Functional integration means cooperation in schools between handicapped and non-handicapped pupils. We make a distinction between group integration when the handicapped pupils are placed in special classes in an ordinary school and individual integration when the handicapped pupil is educated in an ordinary class and is helped by means of separate or coordinated special teaching. In the living situation, functional integration also is divided into group integration and individual integration. Those pupils who live in small hostels in residential areas are group-integrated, while those who live with their own parents or in other private homes are regarded as individually-integrated.

Administrative integration refers to legislation and responsible authorities. It says that laws covering the care of the handicapped should be included in general legislation and that school authorities should be responsible for the education of handicapped as well as non-handicapped persons.

The integration principle which has been carried through in Sweden during the last 10-20 years is facility integration. It has made possible the gradual abolishment of separate special schools in favor of special classes within ordinary schools and the arrangement of living conditions within ordinary housing areas instead of in institutions or boarding schools. Also, in the ordinary school, pupils with learning problems are individually integrated as far as possible. The number of pupils aged 7-17 in the total school system in Sweden is shown in Table 1.

As you can see in the table, 96.6 % of the pupils go to ordinary classes. Some of the pupils in an ordinary class can also get co-ordinated special teaching. This means that a special teacher instructs the pupil during certain periods either in the regular classroom or in a clinic. There is now a trend towards co-ordinated special instruction instead of

TABLE 1

SCHOOL SYSTEM IN SWEDEN, NUMBER OF PUPILS (AGES 7-17) IN PERCENTAGES

Ordinary Schools			Schools for the Mentally Retarded		
Ordinary class + Co-ordinated special teaching	Special class for slow learners	Other Special classes	School proper	Training school	Separate instruction, Others, + No activity (0.008)
96.6	1.8	0.9	0.4	0.2	0.1
99.3			0.7		

TABLE 2

MENTALLY HANDICAPPED PUPILS IN THE SWEDISH SCHOOL SYSTEM

Ordinary School		Age	School for Mentally Retarded Pupils			
Pre-school		7+	Pre-school			Separate instruction
Ordinary class + Co-ordinated special teaching	Class for slow learners	7-16 / 7-17	School proper	Training school		
Upper secondary school		16-19 / 17-21	Vocational education	Vocational training	Occupational training	

teaching in a special class since it means less interference with the child's school situation. The number of pupils in special classes for slow learners has therefore been reduced during recent years and is now only 1.8 %.

The available curricula for mentally handicapped pupils in the Swedish school system are shown in Table 2. In the ordinary school you find co-ordinated special teaching and classes for slow learners.

To be able to cope with the very different types of pupils who are to be instructed, we divide schools for the mentally retarded into different streams. The conventional school period for pupils from 7 to 17 years of age is divided into three streams; school proper, training school and separate instruction. The vocational school is divided into four streams: vocational education, vocational training, occupational training and separate instruction. Separate instruction is a form of education for those unable to come to the school. At present, separate instruction as a rule comprises individual education for 5 hours a week, but we try to find new forms in order to better help the pupils and their families. All other streams are designed for classroom teaching.

In 1968, when new legislation took effect, the plan in Swedish schools for the mentally retarded was to form a program for those usually regarded as non-educable. The aim was to cover all the mentally retarded, to give every single pupil, even the most profoundly retarded, some kind of pedagogical stimulus. Our aim was to give the individual pupil the education and training he needed. Therefore the programs did not contain many elements found in the conventional school for the mentally retarded. Instead, it contained: satisfying basic needs, physical contact, communication, experience of an ordinary life, different kinds of ADL-training, etc. In short, the programs contained what ordinary children and young persons learn without training or in non-structured training at home, at playgrounds, etc.

A comprehensive program in primary ADL-training developed by Liljeroth & Nimeus was financed by the National Swedish Board of Education. It was based upon behavior modification and an operant conditioning technique. It seemed to be a means to reach the severely and profoundly

retarded persons. Teachers and other employees made contact with screened-off, profoundly retarded persons. Training resulted in better behavior and easier care situations for the mentally retarded persons and for the staff. We were all very enthusiastic.

As was to be expected, some problems arose with the programs, with the equipment needed and in teamwork between the teachers and the nursing personnel. These were problems which we believed we should be able to solve. We did not, however, and I will come back to that. But we also met unforeseen set-backs. Some of the mentally retarded did not react as we had expected. They had learned acceptable behavior: to eat, to wash themselves, to brush their teeth, to dress and undress, to use the toilet, etc., but they did not use their knowledge in real situations. Why? Other pupils did not learn, although they seemed to have the ability to do so. Why? We seemed to have missed something very essential. What?

These questions have been studied by Dr. Ingrid Liljeroth in another project sponsored by the National Swedish Board of Education. She has published her findings in a treatise called "Development of Identity of the Mentally Retarded and His Role in Society" (1974). We now think that we have found some of the mistakes being made. I think that the basic fault is that we have given the mentally retarded person the possibility of learning, but not of living in a way where it is useful or desirable to apply his knowledge. It cannot make much sense for a person to dress in order to be taken out for a walk which is part of a timetable at an institution and which does not satisfy any of his own needs or wishes. It is not reasonable to believe that a retarded person shall be motivated to take off his clothes, brush his teeth and go to bed at a scheduled time when he is not sleepy. And who would accept eating food he definitely does not like, at a time when he is not hungry?

Normalization and Integration

The aim of integration is normalization. We want the handicapped person to experience the same things we do. We want them to meet, and if possible become friends with, a non-handicapped person. It is our hope that integration will have a positive effect on the handicapped as well as on us. Furthermore, the integration of the handicapped is in accordance with other aims in our society. We are trying to avoid housing areas for special groups of people, e.g. slum districts, selective entry schools, etc.

The slightly handicapped group was the first to be integrated. For every new group, doubts and hesitations have been voiced, whether they are meaningful or not. People have been afraid of isolation and mobbing of the handicapped and they have questioned the quality of education and care.

We are now about to take the last step, the integration of the severely mentally retarded. This seems to be a difficult step. You ask almost the same questions as before: What is the point of integrating people who are so severely retarded that they obviously cannot perceive what is going on around them? But who asks about the point of segregating them if it is really true that they do not perceive or experience? There seems to be something doubtful, something unreasonable about this last step. You dare not; you cannot do it. Or can you?

The next step in developing the education and the living situation for severely and profoundly mentally retarded persons must be to arrange a normal situation for them, where it is natural and desirable to behave normally and to apply the knowledge achieved in school. This means different things for children than for adults. For children and young persons, it means living in a family or a family-like situation, with warm contact, leisure time activities, etc. but very little, if any, formal training in this situation. But it also means a school to go to where the child is trained, educated primarily for his present situation and maybe also for his future life. So the child needs both a natural home situation and a regular school situation. And this is true, even for the profoundly retarded. For adults, it means a living environment as much like ordinary homes for adults as possible. It also means work or some other kind of occupation. Of course, the adult mentally retarded shall have opportunities for an adequate adult education and training. The non-handicapped adults have these opportunities. But, we must not place the adult mentally retarded in a lifelong role as trainee or pupil.

Thus we have reached the normalization and integration principle from a new direction. We must normalize the life of the mentally retarded person not only for social but also for pedagogical reasons. I will now try to explain the reasons why so far we have not made a greater success in our aim to train severely and profoundly mentally retarded young people.

All children and young persons live somewhere and have the right to education and care. You can differentiate needs and activities and talk about pastime activities and amusements. These and other functions can easily be put into three main functions: housing, education, and medical care.

Housing and education have different consequences for the development of identity (Liljeroth, 1974). The main feature of living conditions is, among other things, to have a place and things of one's own, the care of one's body, emotional development and emotional contacts. At home, you should relax and do mainly what you like to do. At home, you are part of a small unit and you are one of the persons who should have the right to form this home. According to the normalization principle, our normal way of living serves as a model for living in hostels or nursing homes. In other words, you presume you have the best chance to give children at an institution good care and a good up-bringing if you try to copy the normal way of living (Nirje, 1969). This involves the tangible environment as well as the contents of the environment.

School is characterized by everything that is comprised in the word education, e.g. a systematic development of functions and skills, knowledge, cooperation and tasks. If we consider emotional contacts as being characteristic of a home, then intellectual contacts are characteristic of school. According to the normalization principle, the ordinary school serves as a model for schools for handicapped. It is assumed that a normal school environment makes a child happier and fosters his mental development.

The hospital is the greatest resource for medical service. A person is in the hospital only when it is absolutely necessary, and he stays there as short a time as possible for economical reasons, but also out of consideration for his well-being and his normal life together with his people. If possible, medical treatment is offered at home. Health service is often given in school and at work.

Housing, education and medical care have completely different tasks and conditions. The models for these activities differ totally in regard to planning, content, administration, organization, management, etc. Normalization means that housing, education and medical service for the non-handicapped shall serve as models for the handicapped. We then have the greatest chance to reach our goal.

Institutions

An institution as defined here is an organization of two or more for these main functions: housing, education and medical care. Thus an institution also means a house for two or three with these functions.

The boarding school is an institution in which you live and go to school. A care home is an institution in which you live and get medical care. Some institutions have all these functions. An institution differs from a normal school situation by being a place for living and medical care at the same time. For corresponding reasons, an institution can neither be a normal place of living nor a normal hospital. Because of the confusion of different functions and goals, it seems to be impossible to normalize life at an institution. Efforts to separate the different functions within the institution can diminish, but not eliminate, the conflicts of the functions. A total separation of the three functions leads to an abolishment of the institution as it is defined in this paper.

The fact that there are several different functions and aims in an institution leads to demands for cooperation between teachers, nurses, doctors and other personnel. There are also other motives for such cooperation, e.g., the superficially seen, similar activity in school and at home, the multi-disciplinary effort with its at least apparent sophisticated content, and the expected increased efficiency in training and care.

An elaborate cooperation between education and living leads to a confusion of the normal functions in school and at home. School absorbs some of the normal home functions. In addition, the home feels inclined to function as a school, especially for the severely and profoundly mentally retarded pupils. It has been said that these persons should always be surrounded by a pedagogical attitude. We even talk about 24-hour training. In that case not only is the teacher's role as instructor questioned but also the role of the nurse as a fosterer. Is the teacher better suited than the nurse to teach the pupils how to wash themselves or brush their teeth?

An elaborate cooperation thus leads to a confusion of activities and functions which then leads to a loss of normal models. This confusion leads to conflicts of aims.

It is well known and documented that an institution is marked by staff conflicts. The explanations usually given are the lack of training of the personnel and unwillingness and inability to cooperate. There are very few studies made of the institutional system itself as a possible reason for staff conflicts. But, Tizard (1966) has shown that the organization of an institution and not the neglect of the staff result in such restrictions as unreasonable bed times and meal times. Tizard and Nirje both believe that it is possible to normalize life at an institution. A comprehensive analysis of the conflicts in an institution for the mentally retarded has been made by Liljeroth (1974). She concludes that the conflict of aims between activity (instruction, school, and work), living (rest and comfort) and medical care result in an unsolvable conflict. I agree. The confusion of activities inevitably makes the employees feel that they are losing their identity — which they then fight to keep. This is true, no matter how big the institution is or how severely retarded the people are. But the stronger the different employee groups are, the deeper the conflict becomes.

Planning Consequences

The necessary consequence of the foregoing analysis is to effect the normalization principle in all planning for the handicapped. Divergence can only be allowed in individual cases and never in deciding the guiding principles or goals.

Housing facilities for the handicapped shall be separated from facilities for daily activities and medical care and be similar to normal dwellings in regard to size, design and location. The handicapped shall not live together in larger groups than we do normally. For children and young people, a family-like group is the most natural. The function at home aims at emotional development, care of the body, and voluntary activities. School must not influence or rule at-home activities, nor must the medical function, unless the child is ill. Instruction belongs to school, physical activity to work, and medical care to the hospital.

In the same way, the normal school serves as a model for schools for handicapped. This does not mean that all pupils shall do the same things. The content of education varies depending on the ability and interest of the pupils. But all children and young people shall leave home, or be moved from home, in order to go to school. Only in separate cases, when a removal is not possible, the child shall have separate instruction at home.

Medical care for handicapped shall be based on the usual health service organization and its resources. A mentally retarded sick child should be treated at home for as long as possible as other children are, and be sent to the hospital only if special medical treatment is necessary.

The important principle is that the three main functions, housing, education and medical care, can develop separately and on their own terms with the normal functions for the non-handicapped serving as models. No function is to be ruled by any other. Certainly the different functions are dependent on each other. There is a necessary relationship between school and home, expressed in the dialogue between the parents or foster-parents and the teacher, a cooperation where every person knows his role. But you can apply the normalization principle to this and other dialogues.

There are, however, problems to be solved. We end up with more and more knowledge and more and more specialists. They have a need to define their roles and domains. This can result in a lack of cooperation so that the mentally retarded pupil is drawn in different directions. We have tried to solve this problem through a multi-disciplinary approach, but we have met personnel conflicts and conflicts of aims. So this is not the solution. Through an ideological angle of approach and through different analysis, we come to the conclusion that the normalized model must be used even in relations with the mentally retarded person. This model must exist outside the services for the mentally retarded. The specialists must adapt and subordinate themselves to it.

We are now again back to the main functions of which the primary, housing and education (work), belong to an inner circle (Figures 1 and 2). Other functions, medical care, psychological service, social work, etc., are specialist functions and belong to an outer circle (Figures 1 and 2). (The reason why medical care has been defined as a main function is because medical care demands specialized buildings which has led to the development of institutions.)

Figure 1

PUPIL FIRST:
FUNCTIONS AROUND THE PUPIL

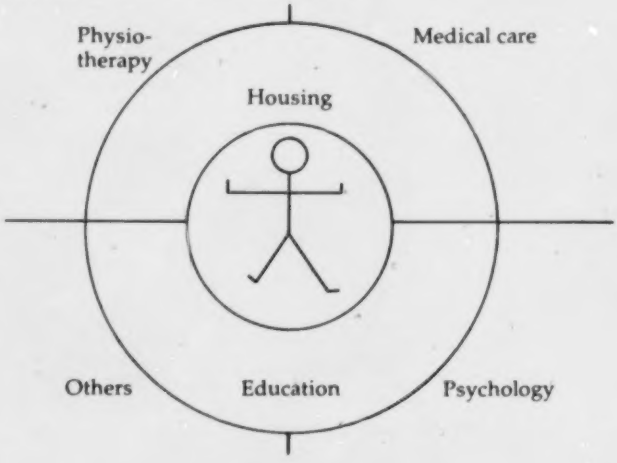
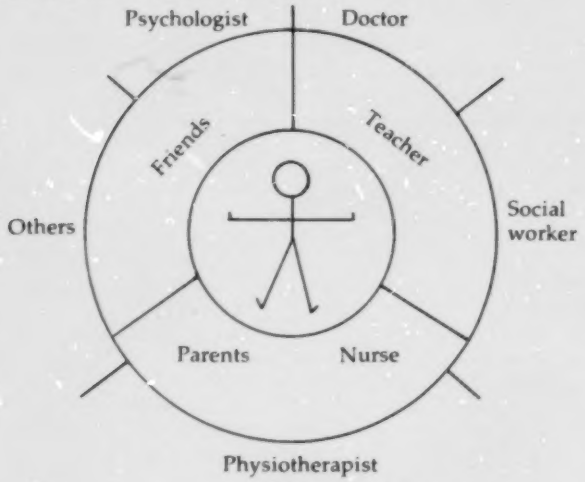


Figure 2

PUPIL FIRST:
PERSONNEL AROUND THE PUPIL



The necessary and desirable cooperation must be directed by those responsible for the different functions. Most important are the parents, parent-substitutes (nurses, etc.) and teachers. They form an inner circle around the mentally retarded pupil. In this inner circle we also find friends. An outer circle consists of different specialists.

There is now a trend that specialists become directors of functions for which they ought not be responsible. Many people believe that the specialists know everything. Everyone who works with the mentally retarded person must, however, have responsibility for his own actions and therefore also must decide what shall be done. He can get support from consulting a specialist but no one can decide for him. We must form the model of cooperation from within, from the child, not from without, from the perspective of the specialists. The principle of "pupil first" was started earlier. Analyses and scientific results confirm it by giving explanations of the reasons behind the principle.

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Problems of Parents and Families When Dealing With the Mentally Retarded Adult

Henri Bissonnier

Abstract. Parental problems in dealing with adult mentally retarded daughters living in a community away from home are discussed. These problems include (a) difficulty in treating the daughters as adults capable of self-determination and, (b) disruption of the communal home with frequent visits and lack of concern for the privacy of the community members. A new program of regulations has been established to maintain and protect the autonomy of the community.

It can be thought that problems of parents in dealing with the profoundly mentally retarded adult are not any more difficult than they may have been during childhood. At least that seems to be true when parents have been able to find a lifetime home for the mentally retarded adult more or less distant from their own home in such a way that, apparently, they could feel discharged of any duties concerning the future of their son or daughter. In fact, experience can be otherwise and is discussed in this paper.

First, the conditions in which this experience has occurred are described. A picture of the reactions noticed among the parents and also of the mentally retarded adults follows. Finally, what we have tried to do in order to avoid, as much as possible, the most serious conflicts and to solve the problems in the interest of the adult, the parents and the team (director, educators or counsellors) working in direct contact with the mentally handicapped is described.

After 25 years of various types of contacts with mentally retarded people of many age ranges — infant, children, teen-agers and adults (up to the age of 80), we have acquired the conviction that, for the severely retarded adults, it is necessary to provide very small communities (8 to 15 people) in a home-like style, but not similar to the family pattern because these men or women are adults and do not need additional parental figures close to them. The so-called normal adults must keep the discrete role of counsellors, not of leaders, to help the retarded in the organization of their own lives. A women's community has been organized (afterwards we shall probably do something with mentally retarded men). This small community is integrated in a village so that the mentally handicapped take part in the various activities of this village: shopping, feasts, celebrations, etc. Their home is a house like the other ones. They practice arts and crafts in another house in the same village. And, it is intended to have a very special type of workshop later: a kind of small hotel where these retarded women will assume various responsibilities such as housekeeping and service in the dining room. Clients of the hotel will be informed of the nature of the workshop so that they will have the opportunity

to discover the human values of the mentally retarded. Families with mentally retarded children, who are often problems in ordinary hotels, will find a special welcome.

This home was partly founded by voluntary contributions of the families of the mentally retarded. Furthermore, to give the mentally retarded adults the feeling of being "at home," families were invited to give part of the furniture (for the bedroom, at least) for their daughters. So, families are directly interested in the administration and have a "de jure" participation in the association, which manages the home, and also in the council. However, the president is not a parent, and parents make up only one-third of the association. Handicapped members of the community will be included in the administrative council. Most of these families have a good middle-class situation and some pay a part of the daily cost for their daughter. Part of this cost, and even the largest part, however, is borne by official organizations more or less directly connected with the state. Official recognition was needed before starting, and we have been obliged to apply the various recommendations of the official public health texts.

Finally, the parents are generally aged, afraid to die and leave their handicapped daughter in a precarious situation. This home has appeared as the only opportunity for confidence concerning the future of their handicapped offspring. This foundation, therefore, has been welcomed by them as a salvation embarcation. Henceforth they may sleep a little more quietly; someone will take care of their daughter when they die.

Very shortly after the establishment of the home, however, problems have begun. Some parents, feeling discharged of their duty, left their daughter totally in the hands of the counsellors. Their only contact would be a rare visit or rare opportunities for the handicapped daughter to spend a weekend at home, when it was not too far from the new home for the retarded. Other parents, the large majority, have been afraid of breaking the bonds with their daughter and trying to use all means possible to keep her in a close relationship with them. This connection was felt as threatened for these reasons:

1. The distance from home which, for the most part, is considerable, with many women being originally from another part of France (in spite of easy communications: highway, fast trains, rapid mail and telephone).

2. Probably the influence of the principal counsellor, a woman in her fifties who had a strong influence on the women in the boarding home of which she was head mistress, where they spent their teenage years.

3. The well-known tendency among mothers of retarded children to keep them in a symbiotic relationship instead of giving them real autonomy. Often, this tendency is shared by the father and even by some members of the family. In such cases, the mentally retarded adult remains an object and has few chances to be really considered as a person able to feel desired, to make choices, to make decisions, even those concerning his (or her) own style of life. Besides, many retarded people assume this mentality and find it to their own convenience to be considered as a permanent child, spoken for like a mute, managed like a "thing."

It is fascinating to hear such a woman, 35 years old, speaking and living only by reference to her family, "my father does that, my brother is there, my mother says that, etc." One is tempted to ask, "But you, Lucy, what do you do? What do you intend to do? You Mary, what do you prefer? You, Janet, what do you think?" We have the feeling that they live their adult lives managed by others instead of living their own personal lives.

Two concrete questions immediately arose, which have brought on a kind of emergency state:

1. Parents want to have their daughter at home whenever they wish and for as long as they like.

2. Parents want to come to the retarded adults' home as often as they have the opportunity to be in the area, and feel themselves totally at home, entering and leaving freely, staying in their daughter's bedroom and sharing the meals of the small community.

The disadvantages of this system have been:

1. It is impossible to realize a real community of handicapped adults if all of them can leave as often and, for as long as, the parents decide and if, at the same time, other parents come and stay freely.

2. These parents often bring into this community their old attitudes of considering their daughter as a permanent child in opposition to the counsellor's efforts to make the retarded adults become and feel "adult-like."

3. The problem of autonomy concerns particularly the bedroom which is, for a retarded adult, her kingdom, and the only place which she considers really her own. This is impossible if someone, even the parents, can take possession of this place without taking into account the opinions and feelings of the owner.

4. Finally, economic problems rapidly become acute; absence of the women signifies cessation of payments for room and board; presence of guests means additional costs. The financial balance of a new and very small community is upset, particularly with the large staff necessary because of the physical impairments of some of the girls.

So, it was absolutely necessary to find an agreement between, on one hand, the very normal and honorable desire of the parents to keep contact as often as possible with their daughter in such a way that they maintain the family relationship and, on the other hand, the needs of the women (aged between 27 and 40) to get more autonomy and constitute a real community with the necessary permanence and intimacy that that requires.

The counsellors also need this permanence and intimacy to help the women and work out a new style of life with them. The parents' influence is not absolutely contradictory to the counsellors' orientations, but often very different. Parents have always had a tendency to perpetually consider their offspring as children even when they have grown up. This is even true with normal children and is more true with the mentally retarded. The staff, on the other hand, try to make the women consider themselves as adults. The counsellors treat them as such, giving them many opportunities to make choices, take options, have their own interests, express their own opinions, and, accumulate their own store (personal and communal) of nice remembrances (parties, picnics, tours, shows, various programs, etc.). The coherance and the maintenance of these basic attitudes, as well as the opportunity to share these various experiences and to retain these remembrances are seriously compromised if the "to and fro" motion of the handicapped adults and of their parents exists.

Consequently, we have established the following program:

1. During at least the first year of residence, parents should try to avoid all things capable of disturbing the life of this new community in order to allow the best opportunity for the women to learn to know each other and to adjust to their environment; the girls must take care not to be out too often or too long.

2. Parents should be required to pay even when their daughters are at the family home — as in a hotel when you want to keep your room — because counsellors (their wages constitute the largest part of the budget) have to be paid even when the daughter is at the parent's home.

3. When parents visit, they must be careful not to invade the home. They should not usually be invited to the common dining room and should respect the privacy of the bedroom, where they may be received by their grown-up

daughter if she, and, if she has a roommate, her roommate agree.

4. When the hotel is established, then the parents will be welcomed by priority as privileged customers. Before that, they may go out in the neighborhood of the home for the retarded and have a restaurant meal with their daughter or have a picnic with her in the countryside.

It has been evident that these regulations were not fully satisfactory and the reactions of some parents were negative. They have the feeling that their daughters have been stolen by the counsellors. And even the counsellors feel uneasy because they fear the parents' reactions and their daughters' reactions, and fear that some parents would have the temptation to go to the opposite extreme and abandon their daughters.

In fact, more and more parents have become aware of the necessity to accept these regulations. They have been sensitive to the administrative aspects of the question and to the financial necessities. The most difficult problem has been to accept that their daughter may have a life of her own. In a certain sense some parents need their daughter and are deeply divided; they understand that the future of their daughter is linked with this adults' home and, at the same time, have the feeling of being deprived of something necessary in their lives. This "surgery," concerning an essential organ, is very painful. We must help parents to accept that their daughter can live by herself and away from them. But, at the same time, we must respect the family connections and eventually make them better and stronger.

Finally, it should be the mentally retarded adult who takes the responsibility to transform these links with her (or his) parents. Here the counsellor has a very important task to assume. He must help the retarded adult to become emotionally and intellectually independent enough to be able to make her parents understand that she must and can have her own life and enjoy it. But, at the same time, they have to take care not to wound this retarded adult in her affection, not to destroy the parental figure, but on the contrary, to reinforce and to smooth out this two-way relationship.

The filial relationship, which has been a babyish one, must progressively become a relationship between adults, as it happens normally with ordinary children in a common family. Relationships must also be built between retarded adults as well as with their brothers, sisters, and all "normal" people, starting with the closest and going to the furthest ones.

This task is fascinating, and we should be convinced that our education and therapeutic work is not achieved until we have accomplished as much as possible of this difficult but rewarding mission — to help the mentally retarded truly become an adult and for her (or his) family to see and accept her (or him) as a real woman (or man) attaining an adult attitude if not always gifted with true adult status.

The problems discussed here in a particular cultural context are seen as universal. The establishment of "normal community living" requires a "disalienation" as a first step in "normalization." The "disinstitutionalization" is not sufficient if the mentally retarded adult is maintained in the status of being managed by others. This problem is perhaps more fundamental than the problems of getting a job and making a living. The mentally retarded person cannot always work and does not always have a sense of money. But he or she can feel treated as an object or considered as a human being. Having the right to be a person is much more important than having the right to be a worker.

HENRI BISSONNIER is a priest and professor of Educational Psychopathology. He teaches at the Institute of Applied Psychopedogogy and at the Paris and Courain Catholic Universities. His public service includes the founding of the mediopedagogical and psychosocial Commission of the International Catholic Child Bureau (1952), coordination of vocational services for the handicapped, and administration and educational and religious counselling for homes for the mentally retarded. He is currently president of the Publications Committee of the International Union of Child Welfare, Vice Chairman of the Council of World Organizations Interested in the Handicapped, President of the Research Group in Special Education (GREPS), and is Director of the "Collection Pedagogic Psychosociable." His publications include research in applied psychopathology and pastoral care.

Pilot Study on Attitudes Toward Trainable Mentally Retarded Persons and Sheltered Workshops

Marlene Rodriguez

Abstract. This paper presents a summary of the data gathered in a pilot study of a survey to be carried out in Costa Rica to study the attitudes and knowledge that factory managers have with regard to trainable mentally retarded persons and sheltered workshops. The pilot study was conducted by the Director of the Department of Special Education of the Ministry of Public Education with the technical assistance of the Multinational Educational Research Center of the Organization of American States in San Jose, Costa Rica.

Results of the pilot study indicate that factory managers, while presently holding indifferent attitudes towards trainable mentally retarded persons, and knowing little about them, would act positively towards them. The full research project will be implemented.

In developing countries, mentally retarded persons often remain unnoticed when they live in rural areas. There they perform simple tasks such as domestic chores and farming, with their parents. However, there is another segment of this population made up of those mentally retarded persons, living in urban areas, who have received a certain type of training, but are unable to find adequate work.

Due to economic and social changes in our country, it becomes imperative that programs be developed to convert these handicapped individuals into relatively productive members of our society.

The study to be carried out was designed in view of an existing need in Costa Rica: There are no sheltered workshops for trainable mentally retarded persons. The trainable

adolescents finish their training and discover they have no possibility of obtaining remunerative work.

It has been suggested that researchers interested in improving the situation of the mentally retarded should first find out what information and attitudinal patterns concerning these individuals exist among the community's population.

Our concern motivated us to carry out this pilot survey study to determine the attitudes of the factory managers toward the trainable mentally retarded persons and toward the sheltered workshops, as well as what degree of knowledge they possess about those two subjects. The objectives:

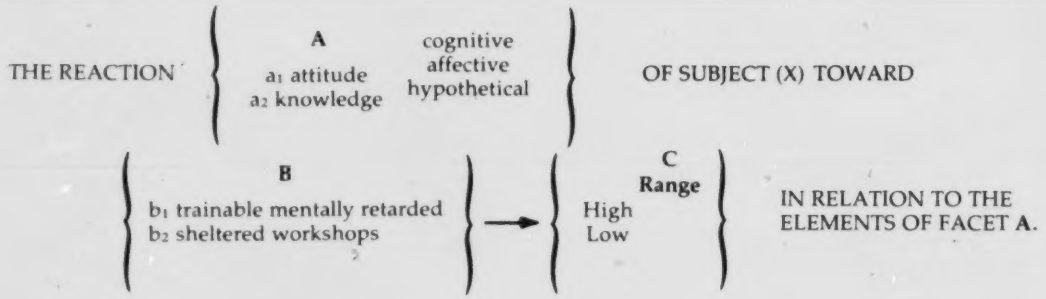
1. To determine the attitudes of factory managers toward the trainable mentally retarded and toward sheltered workshops;

2. To determine the degree of knowledge these managers possess about the trainable mentally retarded and the sheltered workshops;

3. To establish what type of contact they have had with these mentally retarded individuals;

4. To discuss with pertinent institutions the data of the pretest.

To define the attitude universe and systematically analyze the data collected, we utilized, partially, Guttman's (1972) facet theory. The universe in our study can be expressed in a mapping sentence, where its dimensions have been called "facets" and the categories in each dimension are called "elements" of these facets. The following is the mapping sentence utilized in the construction of the attitude-behavior scale for the study.



The arrow pointing to Facet C means the scores of the respondents are mapped from high to low in regard to the attitude and knowledge they have of the various aspects mentioned in the mapping sentence.

The mapping sentence allows us to determine the profiles or possible combinations to be utilized. For example, if we wish to study the attitude of a respondent toward the trainable mentally retarded, we would have the following profile: a_1b_1. As can be observed, the mapping sentence yields four possible profiles or combinations of information ($2a \times 2b = 4$).

The profiles studied are the following:

a_1b_1 attitude of the factory managers toward the trainable mentally retarded

a_1b_2 attitude of the factory managers toward the sheltered workshops

a_2b_1 knowledge of the factory managers about the trainable mentally retarded

a_2b_2 knowledge of the factory managers about the sheltered workshops

Thirty items were constructed in three attitude levels (stereotype, personal feeling and personal hypothetical action). Also included in the questionnaire were three items on demographic data, one on change, one on contact with the object and 15 on knowledge about the attitude objects.

In the attitude-behavior items the value domain or range goes from very positive to very negative, from 1 to 5.

The score that the respondents can obtain in any attitude level has a range from 100 to 500. We have established an arbitrary cut to indicate what is called the "level of indifference." This would be as follows:

0 - 150 very negative
151 - 250 negative
251 - 350 indifferent
351 - 450 positive
450 - 500 very positive

The respondents of the questionnaire utilized in this pilot study were factory managers of various companies in the capital city of Costa Rica. The population of the metropolitan area was 729,145 inhabitants in 1975. In Costa Rica we have 9,000 industries, most of them located in the Province of San Jose and around the capital city.

We chose, at random, among the many industries in the metropolitan area, 20 factories which, due to the nature of their products, offer work possibilities for the trainable mentally retarded persons in sheltered workshops.

A study of the sample indicated that of the 20 managers interviewed, 50% have a university degree, 80% are 31-50 years old and 18 are men.

Two types of analysis were designed for the pretest: (a) descriptive and (b) correlational.

Descriptive Analysis

TABLE 1
Attitude of the Respondents toward the Trainable Mentally Retarded
(Profile: a_1b_1)

Attitude Level	Score of the Respondent
Stereotype	397
Feeling	315
Hypothetical	441

Table 1 corresponds to profile a_1b_1; in other words, the attitude of the factory managers toward the trainable mentally retarded individuals.

The attitude of the respondent with regard to what other people think (societal stereotype) is considered positive, since the total score in this level is 397. (Note our suggestion of the various levels in the range previously discussed.) In the level that studies his personal feelings, the attitude of the respondent falls in the "point of indifference." In the hypothetical level, which indicates how he believes he would act with mentally retarded persons, his attitude is also positive.

In summary, it seems the factory managers or respondents think that in the future they would act in a positive

manner, though at present they have an indifferent attitude with respect to their feelings toward the trainable mentally retarded persons.

TABLE 2
Attitude of the Respondents Toward Sheltered Workshops
(Profile: a_1b_2)

Attitude Level	Score of the Respondent
Stereotype	372
Feeling	402
Hypothetical	393

This table shows the data on the attitude of the factory managers toward the sheltered workshops.

In this case, the attitude of the respondents regarding the opinion of others on this subject is positive, and their personal feelings and hypothetical action toward the sheltered workshops are also positive. Respondents scored highest in the personal feeling level and lowest in the stereotypic.

TABLE 3
Knowledge of the Respondents About the Mentally Retarded and Sheltered Workshops
(Profile: $a_2b_{1,2}$)

Respondent Number	Score
1	8
2	10
3	9
4	11
5	13
6	10
7	10
8	10
9	10
10	7
11	7
12	2
13	6
14	4
15	8
16	7
17	3
18	9
19	9
20	6

Table 3 corresponds to the profiles a_2b_1 and a_2b_2, or the knowledge the factory managers have about mentally retarded persons and also about sheltered workshops.

There were 15 items on knowledge, so the maximum score for all the respondents would be 300 points.

Analyzing this data, we can say that 12 of the respondents scored 50% or higher (maximum was one respondent with 87%), and the rest (8) scored between 47% and 13%. This means that the knowledge the factory managers have about either mentally retarded persons or sheltered workshops is scarce.

The questionnaire included an item to determine what contact these factory managers had had with mentally retarded persons.

The data obtained from the 20 respondents indicate that one-half of them (10) had never had any contact with mentally retarded persons; two had read or studied about them; four had a relative or friend that was mentally retarded, and four managers indicated they had had contact with such persons in their factories.

An item to determine their ability to change their way of life was also included. Eleven managers indicated they would change their way of life somewhat easily; seven indicated it would be somewhat difficult for them to change, and only two answered that it would be very difficult for them to change.

Correlational Analysis

In addition to the descriptive analysis indicated previously, we performed a correlational analysis (Pearson's moment product coefficient) in order to try to determine the correlation between attitudes and contact, attitudes and knowledge and attitudes and change.

No medium or low correlations were discovered within the variables, except between contact and attitude, where we found a low negative correlation (−0.39). To determine the value of the coefficient, it was converted to "Z" and we found the standard error of 0.24. Therefore, the coefficient of −0.39 is not valid, as "Z" does not duplicate its own error.

We also correlated the various attitude levels (stereotype, personal feeling and hypothetical action) of the mentally retarded and sheltered workshops separately with the knowledge variable.

Three low correlation coefficients were discovered. Between stereotypic level and knowledge we found a correlation coefficient of 0.25. Between personal feeling toward the mentally retarded and knowledge about this attitude object we found a negative correlation coefficient (−0.24). The coefficient between hypothetical action and knowledge was 0.34. We can say, therefore, that we found two positive coefficients and a negative one.

The rest of the correlations were below 0.20 (Tables 4 and 5).

TABLE 4
Correlation Between Attitude and Knowledge, Contact and Change

	Contact	Knowledge	Change
ATTITUDE	−0.39	−0.08	0.10

TABLE 5
Correlation Between Attitude and Knowledge

Levels of Attitude	KNOWLEDGE	
	About the Mentally Retarded	About Sheltered Workshops
Stereotype	0.25	−0.002
Feeling	−0.24	0.17
Hypothetical	0.34	0.09

The data were obtained by applying the questionnaire to 20 factory managers chosen at random, as we considered them capable of offering work possibilities which would contribute to the development of sheltered workshops in Costa Rica.

The coefficients we found, therefore, should be taken cautiously, due to the small size of the sample utilized, as well as to a certain degree of homogeneity in it.

For this reason, we consider the information provided in this paper as a first step in the research project to be carried out in Costa Rica to investigate attitudes and knowledge of

those individuals who could provide their support for the establishment of sheltered workshops in this country.

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A Study of Factors Affecting the Success of Mentally Retarded in Industry

Angelina Boric

Abstract. The study aims to investigate the essential factors in vocational success of retarded persons in open industry and to determine the relative influence of personality traits, education or vocational training and attitudes. The results indicate that non-intellective factors are more important than intellectual differences in level of work performance.

The main purpose of this study was to investigate factors affecting the work success of mentally retarded (IQ 63-84) employed in industry. We wished to study individual, social and task features as they bear on the success or failures of individuals, so that appropriate modification in the training program might be instituted.

We hypothesized, that, among the group of mentally retarded, given appropriate work tasks, success or failure, as determined by work criteria, will be more a function of attitudinal, emotional and social situational features than of intelligence.

Our intention was:

1. To study the influence of certain specified variables on the success and integration of the mentally retarded in industry; and

2. To determine the relative influence of personality traits, education or vocational training and attitudes on vocational success of the mentally retarded.

The theoretical basis of the study was the retardation theory (Zigler, 1969) which explains mental retardation as a slow progression of cognitive development.

Methodology

The research sample was selected from the persons who passed or finished special school and who have been diagnosed in school as mildly mentally retarded and borderline (IQ 63-84). The screened sample included in the experimental group 100 mildly mentally retarded (50 males, 50 females) working in industry; the control group included 100 persons (50 males, 50 females), who passed or finished normal school and who are of normal intelligence (IQ 85-105). Participants of the control group work in industry on the same task, in the same place with the mentally retarded.

Data were collected through a series of instruments, including personal data sheet, different rating scales, checking lists, and the scales for checking free time spending and social and political engagement.

Between- and within-group comparisons were computed with respect to level of intelligence, school performance, attitudes, and emotional and social situational features. The role of demographic variables was also explored. All data were computed on a UNIVAC 1110.

Analysis of Data

Three general hypotheses and five specific operational hypotheses were tested relative to: (a) intelligence, (b) school performance, (c) attitudes of social acceptance toward the mentally retarded; and also tested relative to the nonintellective features: (a) motivation, (b) diligence, (c) good work habits, (d) adaptability and (e) skills.

The results of hypothesis testing show that:

1. Nonintellective factors are more important than intellectual differences in level of work performance, if an unskilled or semiskilled task is in question. There was no statistically significant correlation between intelligence (IQ) and success in work, measured by monthly salary either in the experiment ($r = 0.060$) nor in the control group ($r = 0.071$).

2. No statistically significant correlation exists between level and type of education and success in industrial nonqualified and semiqualified work: experimental group: $X^2 = 0.06$; $P = 0.05$; control group: $X^2 = 0.06$; $P = 0.05$.

3. The relation between better information and knowledge of population about mental retardation and progressive attitudes toward mentally retarded has also been examined.

The hypothesis is proved. In our second project, "Attitudes of Population Toward Mentally Retarded Persons," it is proved that quantity of information concerning the problem of mental retardation influences the intensity and progressiveness of attitude of social acceptance toward the retarded (information — progressiveness: $X^2 = 47.47$; $P = 0.845$).

The relationship between knowledge about mental retardation and the attitudes toward mentally retarded persons is not quite clear. It appears that it is not so important how well someone is informed, but from what source his information has been obtained, and what he has learned from these sources. The sources of information are of critical importance for the forming of an attitude: how the information is obtained, where the information originates, and what has been learned (Begab, 1968).

In the same way, higher degree of education, disregarding the type of education, contributed to the progressiveness of attitudes of social acceptance toward the mentally retarded ($X^2 = 90.545$; $P = 0.797$).

Specific Operational Hypotheses

H — 1: Intelligence is an essential factor in vocational success of retarded persons. This was not supported. Experimental group (EG): no statistically significant correlation between intelligence (IQ) and vocational success. EG — total: $r = 0.060$; women: $r = 0.247$; men: $r = -0.151$.

We find a statistically significant positive correlation between vocational success and the following factors: self-discipline $r = 0.257$ EG — total; work habits $r = 0.291$ in EG women and $r = 0.356$ in control group (CG) (women).

No statistically significant correlation was found between adaptability and diligence and vocational success, as we have hypothesized: adaptability: EG — total $r = 0.123$; CG — total $r = 0.100$; diligence: EG — total $r = 0.137$; CG — total $r = 0.198$.

Motivation was examined on the basis of the scale Relation to Work ("Job likes and dislikes"). The scale consists of four questions and 15 alternative responses. The first two questions are related to the attitudes of the workers toward the job in general; the other two to the attitudes of workers toward the present job. The results of interviewing show that motivating factors of priority both in experimental and control group, regardless of the rank, are the following: stability of employment, possibility of advance, good coworkers, and good working conditions.

The accent put on the "stability of employment" as one of the most significant motivating factors (EG: men 36%; women 42%; CG: men 30%; women 26%) is a reflection of the social-economic status in modern industrial society in general, and also in our country. Instability in the offering of new places influenced the choice of motives. It is especially important for women; 42% of EG women and 26% of CG women have pointed out this factor as the most important.

Advance in work is a rather complex problem, determined by subjective and objective factors. Subjective factors are manifested not only in the attitudes of the worker toward the work and his method of work, but also in his ambitions, motivation and human interrelationship. Objective factors (light, ventilation, noise, equipment, etc.) influence more rapid advance of workers in certain jobs.

The importance of good interrelationship ("good coworkers") is very well-known and need not be stressed. Work in industry is collective work. Coordinate functioning of a collective depends upon the ability of each single worker to form and keep good relations with collaborators and managers. For mentally retarded workers this factor is very important; to have good relations and to be accepted by coworkers and managers.

Good working conditions is one of the four priority motivating factors. Good working conditions include a good organization of work, physical surroundings and information. It is a very important factor for all workers, independent of qualifications. Information in industry about work, production, and social and political organizations must be given concretely and understandably.

We did not examine the influence of monotony on work performance. Monotony was not an emphasized problem, in our sample. Mentally retarded persons endure and adapt to repetitive work more easily than workers of normal intelligence. Many studies point out the significance of the relation between intelligence and monotony: more intelligent workers find repetitive, automatized work more difficult than do their less intelligent coworkers.

Analysis of the spending of free time of the male experimental and control groups, regardless of the rank, shows that the dominant leisure time is taken up by television, journals (editions for young people), friends, sports and musical entertainment. The male control group is the superior one: 14 workers (28%) have driver's licenses; in the experimental group only 1 (2%); in the control group 10 (20%) workers are members of sports societies; in the experimental group 5 (10%).

The dominant type of recreation and spending free time in both groups for women is working at home, watching television, and reading journals (editions for youth). In second place come friends, excursions, musical entertainment, and movies. Only one woman (2%) of the experimental group has a driver's license (IQ 80, CA 22, 8); two are members of a cultural association (singing group) (IQ 67, CA 17, 5).

Discussion and Implication of Results

There are numerous problems in comparative studies, from theoretical approach and research design to the evaluation of obtained data.

The primary problem of this study was the question of research design and partially the question of equivalent measurement of the same psychological processes for both groups. Many modern authors are questioning the role of the control group in research (Baumeister, 1967; Mittler, 1974; McKinney, 1975). The question concerns the necessity of a control group in research and how to find acceptable criteria of measurement and evaluation.

McKinney (1975) believes that the control group is necessary: it is the only way of evaluating the success of workers because some changes could occur in the work skills of one worker as a result of habituating on the work.

We have tried to point out the factors influencing the success in industrial work of subjects of both the experimental and control groups. We did not discover any specific mechanism which should make a difference between groups. The factors influencing the success of both groups working in industry on the same tasks are the same. A methodological approach to the problem was the same for both groups. "One principle is not less important, less significant or less reliable just because it refers to the group of retarded" (Baumeister, 1967; Gardner, 1970).

Superior results were observed when manager and the man together act through specific goals to be achieved, rather than merely discuss needed improvement (Meyer, Kay, French, 1975; Wexley & Yuki, 1975).

In our industrial plants, the common complaint of managers and workers is in the system of leadership. Our workers are motivated by specific goals, consisting of forming of plans and getting information about the task without superfluous verbal discussions.

"The individuals are content with their work as far as the job gives them that, what they wish, and they work with effect as far as this effect in work leads to the realization of the wishes" (Lawler & Porter, 1975; Wexley & Yuki, 1975).

Conclusions and Recommendations

Comparative experimental studies like the "Study of Factors Affecting the Success of Mentally Retarded in Industry" contain several problems that must be investigated. The analysis of the results in this study point out the necessity of critical review of research of comparative studies.

1. We believe that the effect of comparative experimental study will be greater if the compared groups are completely heterogeneous. The mildly mentally retarded adults disappear in the general population after they finish the special school. They are integrated into society and in working situations, and it is very difficult to form a sample.

2. The stigma of terms "special school," and "mentally retarded" have a great influence on the attitudes of the population toward the mentally retarded and their acceptance. If, in employment of a person, the accent is not put on the type of elementary school ("normal," "special") mildly mentally retarded persons have a chance to be completely integrated into the normal working group and to avoid the stigma of categorization. Subjects of the experimental group of this study had this chance. They have been treated in the same way as their mates who went to or passed regular primary school.

3. No specific factors influencing the success of the mildly mentally retarded employed in industry exist which could make them different from their normal mates in the same work place. Work success for the subjects of both the experimental group and control group depend more on motivation, emotional stability, skill, adaptability, and other factors, than intelligence.

4. If differences exist between the groups, they should be more of quantitative than of qualitative nature. In evaluating the success of the workers in industry, taking as criteria for evaluation their average monthly salaries, the control group is superior. Taken individually, however, some subjects of the experimental group earn more than their control counterparts.

5. We have proved that mildly mentally retarded persons of socio-cultural type, former pupils of the special schools, are able to work in big industrial enterprises on the same jobs and under the same conditions as their normal mates. Of course, the jobs are unskilled and semiskilled. In the same way, we have proved that no special problems exist in social integration of mildly mentally retarded adults. In the work place as well as in society, they are integrated in a satisfactory way.

"Man is not less a human being only because he is less intelligent. If there is a question of work, the good personal characteristics are more important than the intelligence" (Davies, 1968).

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PART II

Research Programs And Projects

A Program of Administrative Research and Development Towards Normalization

John McKenna

Abstract. In the past two decades there has been an increasing interest in administrative research and development in response to growing criticism of existing systems of service delivery in the fields of mental handicap and mental health. Administrative research in the field of mental handicap has had no relevant theoretical basis and may be described as having a confused identity. This is principally because of the number and variety of disciplines engaged in the field and because of the complexity of administrative structures involved with the various levels of mental handicap. Existing international efforts are evaluated. International cooperation, national and regional action, and family and personal involvement are required to recognize mental handicap as a problem of human existence and a responsibility for all.

The principal objectives of administration are to identify needs, to develop and deliver services appropriate to those needs and to maintain a balance between needs and resources. In retrospect it seems easy to understand why services for the handicapped have developed in piecemeal fashion in most countries, often segregated from the broad generic services and often lagging behind other services in the provision of facilities and personnel.

First because of the time lag commonly occurring between the findings of research, the formulation of new concepts and the transmission of these in terms which will make them more generally understood and acceptable, administrators with decision-making powers may promote policies which are influenced by already out-of-date or half-understood theories. People work within the framework of theories with which they are familiar, and in the absence of reliable professional advice, policies can be obsolete even in the process of formulation.

Children have always been a powerless minority with no voice in the making of decisions. Like all minority groups, their welfare depends principally upon their parents and upon the responses of decision makers to the exhortations and prohibitions of society's moral values. Mentally handicapped children raise many more questions and the nurturing and possible expansion of their limited potential may appear as a questionable goal, even to their parents.

There are growing demands for services for the mentally handicapped but these demands often vary from parent to parent, from region to region, from country to country. These variations may have a rational basis. For example, the needs of the profoundly handicapped differ from those of the mildly handicapped; the services for those in a sparsely populated rural area must differ from those in a densely populated urban area; and finally, societies' needs are satisfied according to their levels of development, their resources, their value systems and the strength of their varying pressure groups. Pressure groups exist because of demands. Needs may be different, for parents and pressure groups may not know how to articulate needs. These require interpretation and formulation by professionals.

In the past, different forms of handicap and different levels of mental handicap generated their own specific needs. Many created their own special training programs for personnel, segregated from broad generic services. Thus, administrative development often reflected the imbalance between needs and resources, lacking a systematized approach and a theory of management.

As countries developed their social services and institutions, the tendency was to exclude from mainstream services those persons with special needs. Such services were as much the fruit of human compassion as of administrative expediency and they reflected attitudes which were universally commendable by the standards of the times.

The assumption has been accepted too readily in the past that rehabilitation programs are essentially for overcoming the internal pathology of mentally handicapped persons. For this reason the major thrust of resources has been directed towards biomedical research and to sickness-oriented facilities. With the growing realization that all problems of the handicapped do not arise from within, more sensitive manipulation of environmental factors can play a major part in offsetting the effects of initial handicapping factors. Of

course it is true that the more readily identifiable forms of handicap, those with medical and nursing needs, have received priority initially. The models developed for these have had a strong influence in all subsequent provisions for the handicapped.

Social organizations have tended to develop on the basis of existing values without any systematic attempts to measure their social outcomes or to predict, not only their effects but also their non-intentional side effects. There was little insight into the fact that the setting in which learning takes place has a profound effect upon the learner, that organizational models or their absence are in many ways as important as the instructional content of education.

Unfortunately in human affairs traditional structures, whatever their inadequacies, have no need to prove their efficacy and often little desire to make way for innovative structures, however appropriate.

These are some of the difficulties which we inherit from the past. We cannot doubt the sincerity of those who have worked for the handicapped before us. Ignorance and neglect may have prejudiced the chances of the handicapped in the past but rarely malice. In effecting changes in existing social structures, respect for past achievements, an understanding of present political structures and ideology, a recognition of economic realities and a sense of timing must inform our actions.

Today more complex and dynamic attitudes are evolving with regard to the handicapped; more reflection about the effects of different approaches to care; more solicitude about their personal and social needs and their vocational futures, and above all, a respect for their right to a participative role in their own communities.

The principle of normalization and its major corollary, the concept of integration, are regarded by many as the most effective means of humanizing existing services for the mentally handicapped, many of which are still inspired by old administrative concepts. The principle of normalization is defined by Wolfensberger (1972) as "the integration of means which are as culturally normative as possible, in order to establish and/or maintain personal behaviors and characteristics which are as culturally normative as possible." Those of us who see the validity of normalization as so self-evident as well as morally justifiable have no difficulty in accepting normalization and its corollaries as universal terminal objectives for the mentally handicapped. For the zealous advocate, crusades are stimulating and difficulties are easily surmounted. But passionate intensity of itself is not enough. Understanding of the intervening variables in the knowledge-to-action cycle is essential. The findings of research and their implementation will vary in many ways according to the community where this takes place.

It is generally acknowledged that normalization as a principle of management owes its origins to the Scandinavian countries, particularly Sweden and Denmark. If we accept normalization as a principle of management, the principle must be translated to make it relevent to the culture where it is being introduced. A straight transplant will rarely show satisfactory growth. The value systems of the culture, the prevailing ideology and the existing models of service delivery must be taken into account. Value systems represent our fundamental beliefs about the meaning of life and of its great mysteries, generation and suffering, the right to life and relationships with others, and death. For example, Dr. Birch at the Annual General Meeting (AGM) of the National Association for the Mentally Handicapped in Ireland (1976) expressed disapproval of the suggestion that masturbation should be taught to the mentally handicapped in order to fulfill their sexual needs. But he condemned as equally unworthy our own too frequently employed solution — segregation of the sexes. One stressed the physical aspect of sexuality, the other denied the affectional needs of the handicapped, both equally dehumanizing. Ideologies characterize our political and economic thinking, give direction to striving towards our objectives, define our opinions and doctrines and set standards for our behavior. For example, many interpretations can be put upon the simple phrase "Equality of Opportunity." What may appear as egalitarian here may be regarded in other parts of the world as discriminatory. Models are the means through which we realize our ideologies. A series of complicated shunts have to be made before any ideas involving radical change can modify or alter existing models or delivery of services. However daunting it may appear to propose normalization as a universal objective for the handicapped, it is our sense of what is possible which will give us momentum and communicate dynamism to workers in the field.

In those parts of the world where knowledge of the alleviation and remediation of mental handicap has made great advances there has been a concomitant sophistication in methods of retrieval, storage and discrimination of research data. Regrettably, a great deal of valuable information is directed to limited targets at national, regional or local levels. More could be done to improve international cooperation and to make reciprocal assistance more effective. Organizations such as World Health Organization (WHO), UNESCO (United Nations Education, Scientific and Cultural Organization), and International Labor Organization (ILO) are deeply committed to the principle of acceptance of the mentally handicapped in their own community and have by their resolutions shown their respect for the rights and potentialities of the mentally handicapped. For example, last year UNESCO at its Plenary meeting in May, passed the Resolution on the Prevention of Disability of Disabled Persons; ILO passed a Resolution concerning Vocational Rehabilitation and Social Reintegration of Disabled or Handicapped Persons; and WHO at its Twenty-Eighth Assembly passed a series of resolutions on mental retardation including a request to the Director-General to assist in the development of community care for the mentally handicapped. The goals of these organizations are broad and varied and in the field of mental handicap their resolutions may remain purely exhortatory unless more specialized agencies take the responsibility for their implementation.

Such organizations as the International League of Societies for the Mentally Handicapped (ILSMH) or the International Association for the Scientific Study of Mental Deficiency (IASSMD) are in a better position to effect dissemination of specialized information at international and national levels. Again they are in a better position to initiate projects where parents of mentally handicapped persons, teachers, doctors, nurses and allied professional staff engaged in the field can share learning experiences.

Specialized agencies such as the ILSMH cannot, however, attain their objectives through parents, teachers, nurses or doctors. The implementation of aims and policies must be mediated through other professional bodies in some instances and in others through key personnel.

One example of such information exchange is the World Confederation of Teaching Profession (WCOTP) Seminar on the Education of Handicapped Children which took place in Ireland in 1974 (McKenna, 1974). The statements from the Final Declaration of this Conference bear testimony to the fact that teachers at an international level have accepted the feasibility of integrating handicapped children in the mainstream of education.

Important statements from this document (Birch, 1976) are:

"Education should be designed to ensure . . .

a) the systematic organization of preventive and remedial measures for the handicapped . . .

b) the objective of integrating children who are handicapped or in difficulty within the general education system

c) a basic psycho-pedagogical preparation and practice at the highest level for all teachers, linked with the essential acquisition of academic knowledge."

Another section of this document deals with Teacher Training, and in this context several important statements reflect an entirely new conception of the teacher's role vis-a-vis the handicapped. These are as follows:

"a) Every teacher, regardless of grade or subject matter, should acquire a working knowledge of the different kinds of handicap so that he will be able to recognize them. This knowledge should be acquired by the teacher during his initial training. Teachers should be given the opportunity to acquire this knowledge in the course of further training.

b) During initial teacher-training the teacher should have opportunity to study methods of teaching handicapped children so that he may be better able to deal with handicapped he might meet in normal classes.

c) During initial training, the teacher should be informed as to ways of dealing with handicapped children so that he or she is able to work effectively as part of the medico-educational team.

d) There is an outstanding need for more teachers specialized in teaching children with specific handicaps. Encouragement should be given to teachers in normal schools to take in-service courses leading to qualifications for teaching handicapped children in special schools."

Again a section dealing with early childhood education reflects our increased understanding of the crucial importance of early stimulation in developing intellectual, emotional and social competence in the growing child.

"a) Early childhood education has a very important role as the first and most effective time to meet the needs of the handicapped. For this reason early childhood education should be enlarged with the aim of ensuring that suitable opportunities are available for every child as soon as possible.

b) Teachers who are being trained for the education of children in the early years should have part of their course devoted to the identification of handicaps, including social handicaps, and to the education and guidance of the handicapped.

Despite such hopeful statements, there is evidence to suggest that many teachers themselves on the basis of their own experience do not believe in integration" (ILSMH Conf. 1974).

In terms of specialized training, pupil-teacher ratio, special equipment and so on, segregated special schools have, in many cultures, a much higher standard than ordinary schools. Controlled longitudinal studies of the advantages of administrative arrangements will have to present more convincing evidence than we have at present, for, what most people know is, that certain children do well when they encounter exceptionally good teachers whatever the administrative arrangements may be. It is worth noting however, that protagonists of normalization generally envisage long-term social advantages for the mentally handicapped rather than short-term educational gains. Sincerely-held opinions about the validity of existing values of society, however, can sometimes create resistance to change, and the zealous advocacy of innovators can change subtly to disparagement and polemics.

In order to initiate social action to benefit the handicapped there are certain general principles which should inform our approach:

1. The mentally handicapped should not be manipulated like pawns in an ideological game to satisfy doctrinaire theorists. Every move should have a rational basis with some evidence of future favorable consequences for each individual.

2. Mentally handicapped persons should be educated and prepared for social integration in circumstances which are most appropriate to their ability in the culture where they are reared. The principal aim of schools is education, not social engineering.

3. Innovation should not seem to invalidate the experience and contributions of personnel already working the field.

4. Staff training schemes for all personnel engaged in the field of mental handicap should be a structured element in any program of change. Many teachers in ordinary schools, however attracted they may be to the principle of integration of the handicapped, have had no special training in dealing with their problems. Knowledge itself does not effect change in individuals. Attitude change takes place only with effective practical experience.

5. Flexibility and adaptiveness rather than rules of thumb should be the fruit of professional preparation. Attitudes and values acquired in the course of training will have a profound effect on the usefulness of personnel. Factual information and content of courses have a relatively short life in the memory of trained personnel: feelings and attitudes have a much longer life and stronger effect on behavior.

6. Work with the parents of mentally handicapped children should form an integral part of training programs for nurses, teachers, doctors and psychologists in the field of mental handicap. As professionals are trained, so will they work. In this way parents can become invaluable auxilliaries in the rearing of their children. Parent involvement in programs only to the extent that they are cooperative and acquiescent is no longer adequate. In special education one of the primary objectives may well become the modification and restructuring of child-rearing patterns in parents of mentally handicapped children (McKenna, 1973).

Social change for many reasons is a difficult and painful process, but the hazards of unplanned change are such that it is imperative to develop a theoretical basis for our administrators and to supply them with strategies for creating a better society for mentally handicapped individuals.

In many parts of the world the unpalatable fact has to be faced that the vocational futures of many of our handicapped depend much more on economic and social conditions and on the allotment of resources rather than upon any marked personal deficiencies which they may have. For this reason, articulate parents and interested professionals have banded together in National Societies to act as pressure groups, to formulate needs and to ensure long-term planning for the mentally handicapped as an act of policy. Progressive changes generally involve painful decisions for policy makers about the diversion of meager funds from one set of objectives to another. Policy makers can act more confidently when their decisions are founded on more precise theory and on more accurate data.

The science of knowledge utilization has made marked strides in the developed countries of the world. Effective delivery of services is closely related to the speed with which research knowledge is spread around the service community, so it is no surprise to find that in many places in the United States rehabilitation programs for the handicapped of a break-through nature have been achieved.

Concomitant progress in communication media and in transport have made our planet a much smaller place than it was a decade ago. Progress can no longer take place in isolation from other parts of our world. Social problems and the tensions they engender have a tendency to spill over national boundaries and disturb the harmony which ideally should exist between nations. The American Association on Mental

Deficiency (AAMD) and the Department of Health, Education and Welfare (HEW) are becoming leaders in the field of international cooperation; this is an essential step in any program for the mentally handicapped.

International Cooperation

We who profess commitment to the rights of the handicapped have a duty to maintain contact with such international organizations, governmental and non-governmental, which can uphold the rights of handicapped persons to education, to health, to work, to family and to social life. We should regard it as an obligation to seek information about areas in the world where specific intervention at international levels could help mentally handicapped individuals.

National and Regional Action

At a national level we should be prepared to scrutinize the values of society, to question the validity of current ideology and of existing models, to initiate social action, to develop innovative strategies and attempt to predict the consequences of our intervention. National societies for the mentally handicapped have an obligation to disseminate new knowledge about the possibilities for improving the lot of the handicapped among members of professional organizations who may be able to apply such knowledge for the benefit of the mentally handicapped. This entails working with associations of doctors, nurses, teachers, and psychologists where their professional involvement may make them key personnel in implementing progressive changes.

Family and Personal Involvement

With our increased knowledge of the effects of parent-child interaction patterns, a more systematic approach could be profitably adapted to the education and instruction of parents in favorable child-rearing patterns, especially in the case of parents with "at risk" children. Informed parents can be the most effective auxiliary force in reducing the unfavorable consequences of an initial disability. At another level, groups of parents of mentally handicapped children who join forces can exercise a favorable influence upon policy makers on behalf of their children.

At the personal level, we should seek to reaffirm the rights of the handicapped to a participative role in their own communities and help them towards a more dignified and joyous life. It becomes more clear that being mentally handicapped is not only the problem of an individual or of a family, or nation, but a problem of human existence. We who are leaders in this field are privileged to accept the responsibility for collaborative action and to evaluate what can be adapted from other cultures for the benefit of the handicapped.

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Use of Group Techniques in the Rehabilitation of the Retarded in Israel

Emanuel Chigier

Abstract. Research has shown that using a "group milieu technique" can lead to greater productivity and improved behavior in the sheltered workshop. With adequate preparation and follow-through, small groups of retarded individuals with moderate to severe retardation can be placed successfully in open industry. It is suggested that over-emphasis on "individualization techniques" be replaced by more attention to behavioral improvement and provision of emotional support through the use of group techniques in the vocational rehabilitation of the retarded.

All over the world, thousands of severely retarded adolescents and young adults are to be found in institutions or in sheltered work environments. Usually they have little choice of changing their setting and going out into the open world of work. They are regarded as trainable, but not educable. They are regarded as requiring individual approaches because they have Intelligence Quotients of under 50, poor co-ordination, poor concentration, low levels of emotional stability, minimal motivation for work, a lack of responsibility and a low self-esteem. They are regarded as being capable only of doing routine, stereotyped, repetitive mechanical tasks, and what is more, it is considered by those who know about the retarded, that they are happy and satisfied to do this kind of work. If there are behavior problems that cause trouble, the solution is sought through liberal use of sedatives or tranquillizing drugs and further administrative withdrawal from the general setting. Inter-personal reactions

are generally regarded as being negative or dangerous when they occur. Although people the world over generally function best in small groups, a group approach to the retarded is not regarded as being desirable or worthwhile because of the verbal, cognitive and behavioral limitations of those who are severely retarded.

Since 1965, as a result of the research projects in Israel sponsored by Social and Rehabilitation Services (SRS), United States Department of Health, Education and Welfare, I have had the opportunity of looking at these views and have found that most of them are wrong. Those items that are true pertain just as much to the mode of treatment that the retarded receives as to the fact that a moderate to severe level of retardation is present.

Most rehabilitation workers working with the group of retarded tend to make the same sort of mistake that the general public makes when reacting to the retarded. We tend to plan our management of the retarded according to the way they are, rather than to what they might be. We regard Intelligence Quotient as the upper limit of possible achievement, rather than to see it as the floor — the present functional ability of a person. And worst of all, we tend to treat the retarded in a way that we think is good for him, and good for society. We do not usually begin with the viewpoint — what are the needs of the retarded person himself.

It is the theme of this paper that one of the basic needs of a retarded person is the need to belong. A severely retarded person often has trouble belonging. In his own family he is usually out of step; often they are ashamed of him. In the street, he does not belong. He has no affiliation to a peer group. In the institution, residential or ambulatory, he often has difficulty developing a sense of belonging, of pride and identity with the institution because of the size and nature of the institution, the attitude of the staff, and the social implications of institutionalization.

Since most of us satisfy our need to belong through membership in small groups, the object of my research over the past 10 years has been to evaluate the efficacy of the use of a group approach in rehabilitation of the moderately to severely retarded.

Group Work with the Retarded in an Agricultural Setting

The first research project, 1965-1968, was carried out in Israel through Akim — Israel Society for Rehabilitation of the Mentally Handicapped, and dealt with retarded persons in a residential institution, sited in an agricultural area, about 30 minutes' drive outside Tel Aviv.

In applying the principles of group dynamics to severely retarded persons, the project first established four peer groups, oriented toward becoming work groups and using a group milieu approach. Each consisted of approximately 10 members and had its own group instructor, experienced in working with youths. Chronological age ranged from 16-32 years, with an average of 20 years; the mental age, 3-8 years, with an average of 5½ years. About one-third of the participants had an associated handicap such as Down's syndrome, cerebral palsy, or epilepsy. Three groups lived in an institution, which was set up at a work colony. The individuals in the fourth group lived at home with their parents in an urban area.

Each group functioned as a group 8 hours a day for 5½ days a week. The first three months were devoted solely to consolidation of the group through games, walks, social activities, and an intensive program of physical education. The next stage was a group project, such as setting up a rose garden — a tangible project with a clearly defined goal. In the third phase, the group worked outside the institution in citrus groves on a voluntary basis. When the group had demonstrated its capabilities, work was obtained on a piecework basis, with payment based on the productivity of the group as a whole; 50% of the pay went to the institution, 25% to the group fund, and 25% to the individual members. Since there is a labor shortage in Israel, the groups were able to find enough work in various fields to keep them employed throughout the year.

Thus, within a period of 8 or 9 months, the role of the institution became that of a "rural hostel". Trainees were able to walk as a group to orange groves two or three miles away, allocate the work among themselves, stop for lunch in the grove, and return to the institution after a day's work — all with only nominal supervision by the instructor. The same ability was demonstrated by all four groups.

The basic principles of a group approach to the mentally retarded are the establishment of a peer group, the opportunity of the group instructor to have maximum responsibility for his own group, and the creation of a group milieu covering a full work day.

Through the process of group dynamics, individuals working within a group experienced greater satisfaction, found effective means of coping with the crises and stresses of an open society, and exhibited more mature behavior — even though their cognitive abilities continued to be extremely limited.

Within the security of their own group, the retarded individuals enjoyed the experience of working in the open labor market and were able to reach 30-40% of the productivity of regular agriculture workers.

Opportunities for employment were better when the retarded applicants were considered as a group, the employer thus being relieved of responsibility for the individual. Where groups had been working for a year, studies indicated that although the inhabitants retained their negative attitude toward the mentally retarded in general, two-thirds were willing to have a group of severely retarded males from the institution work in their area. The inhabitants actually preferred retarded workers to the regular labor force because the retarded worked more slowly and carefully and thus damaged less fruit: only 7% as opposed to 13%. Since agricultural work is paid for on a piecework basis, this represented a savings for the citrus farmer. He also benefited from their willingness to pick the oranges at the very top and the very bottom of the tree, which the regular pickers would not do because of the extra effort involved.

When the project ended, a group of about 17 trainees was set up to work in the orange groves while maintaining its headquarters at the institution. Nine years later they are still working, with no difficulties whatsoever. They have become an accepted part of the labor force in the village, and their productivity has increased with experience. Of particular interest is the fact that new members who did not participate in the research project have joined the group and have been successfully absorbed. Although further research needs to be done in this area, it appears that when a group of mentally retarded persons is well-established and working regularly and smoothly, the group as a whole, together with the instructor, can act as a therapeutic medium for the training and rehabilitation of new members. The established group members become auxiliary therapists, and help to modify the behavior and increase the work motivation of newcomers.

Five retarded workers from the urban group, who live at home, continue to work in the same park nursery where they were employed throughout the demonstration. The director of the nursery supervises their work himself. They are paid on an individual basis by the city. All have shown improved behavior, and one has reached 80% of the productivity of a trained regular worker. A sixth member, after making outstanding progress with the group, was accepted as a worker in the parks of his home town.

Group Work with the Retarded in Industry

Since 1973, a second project sponsored by SRS is underway in Tel Aviv, carried out by the Israel Society for Rehabilitation of the Disabled, with the co-operation of the Tel Aviv branch of Akim (Project 19-P-58073-F-01). This research project is a study of the effect of a group approach on the behavior and productivity of mentally retarded adolescents and youth in a sheltered workshop.

The specific aims of the project are:

1. To ascertain the applicability of a group approach to retarded people in sheltered workshops;

2. To investigate the stages of group formation among severely mentally retarded adolescents and young adults;

3. To measure the effect of group technique on the productivity of trainees in a sheltered workshop;

4. To ascertain the effect of a group technique on the behavior of trainees in a sheltered workshop;

5. To derive conclusions and present practical recommendations on the use of a group technique for the rehabilitation of the mentally handicapped.

In the first phase of the project, 13 male trainees were selected to be in the experimental population and 13 others, matched for age, IQ, and family background were chosen to be in the control population. They were selected out of a population of 123 retarded citizens working at the Achikam workshop in Tel Aviv. The average IQ was 50 (range 44-65), average age was 20 years (range 16-28 years), and socio-economic status in the experimental population was good in 5 cases, average in 4, and poor in 4. In the control population socio-economic status was good in 1, average in 8 and poor in 4.

The average length of time working in the sheltered workshop was 4 years 2 months, and for the control population 3 years and 2 months.

All members of both groups were examined psychologically, and home interviews were carried out in order to get some basic findings with regard to intellectual level, family set-up, and behavior pattern as described by the mother and father on home interview. Only male trainees were used, since they comprise the majority in the workshop. Co-operation was maximal and no problems were encountered on psychological testing nor at the home interview.

Two work instructors were allocated to the respective groups and were briefed with regard to scoring work output, work behavior and general behavior during the baseline period. All the staff of the workshops were informed about the nature of the research project, including the two instructors, but in a carefully balanced manner, so that the possible advantages and disadvantages of using a group technique were given equal weight. Any bias towards positive belief in the value of the group approach was avoided as much as possible. During the baseline period of measurement and observation, neither of the two work instructors knew which group would be the experimental group and which the control group. The baseline period lasted for four weeks during the month of March, 1974.

At the end of the baseline period, one instructor's group was designated to be the experimental group and the other the control group. Both instructors were informed that it was up to them to demonstrate which method would show better results in productivity, i.e., the individual or the group method. If anything, the instructor working with the control group and using the individual method was more enthusiastic about the individual approach than the instructor working with the experimental group was about the group approach. Measurements of productivity, work behavior and behavior pattern were continued as beforehand. In order to stimulate greater productivity, the instructor working with the control group posted figures on individual output next to the work area of each of her trainees for each week.

The work with the experimental group was carried out in a "low profile" manner, and in the following way:

Trainees remained at their regular work areas within the workshop. They were informed that from now on, their work was to be together on a collective basis, and that productivity would be scored for the group as a whole on a weekly basis. The instructor was under close supervision and in close contact with the research assistant. The group met as a group every day usually at the end of the work day, for a period of about 15 minutes to discuss the progress of the group. These meetings were eagerly anticipated, were very lively and turned out to be a great success. A weekly chart showed the rating of the group on productivity for the work on a 5-point range from excellent to poor. At the end of the month trainees were paid almost equally with a slight difference in payment between "good" and "average" workers. The group tended to go together to the dining room for snacks and for lunch, sitting together in the dining room at the center. The experimental group was set up without any difficulty. Both populations functioned in their respective ways for a period of 1 year — and data were obtained from each population on work behavior, general behavior and productivity of trainees in both populations.

At the end of the experimental period findings were as follows:

1. Trainees in the experimental population showed improved behavior in terms of less aggression (active or passive aggression), less withdrawal, and greater pro-social behavior. The director of the Center, the group instructor and other personnel who had contacts with the trainees were definitely impressed by the better behavior, greater alertness, and improved emotional attitude of the trainees in the experimental population as compared to the control population.

2. Despite time taken off for group meetings and discussion during the working day, productivity of the experimental population was greater than that of the control population.

It was concluded that a group approach is feasible in a sheltered workshop, can be carried out without disruptions, and can provide a medium for better behavior, self-satisfaction, and productivity on the part of retarded citizens working in a group setting.

In the second phase of the project, new groups are being set up. From the original experimental group, five retarded workers have been placed as a group in open industry since April, 1975. They work in a tube-making plant, which has 180 employees. For the first month, they worked under the supervision of their group instructor. But after 1 month, it was possible to withdraw the group instructor, and they are under direct supervision of the foreman in the factory. Part of the time they work together as a group, but more and more they are working individually or with other workers. Their sense of belonging is maintained through the loose small group structure, while at the same time they are integrated into open industry and have numerous work and social contacts during the day with other workers — male and female. The work is of a satisfactory standard, they come on time, are generally conscientious, have had no accidents and there have been no difficulties in relations between them and others. This is because group placement was done carefully, with adequate preparation of management and staff, presence of group instructor for the first month and intensive follow-through contacts maintained all the time. Productivity is satisfactory, with two individuals almost reaching the productivity of a regular industrial worker. Payment is made in terms of productivity and full social benefits have been provided. If the opportunity exists, the management is

interested in increasing the number of retarded persons working in the plant and are willing to recommend the same procedure to other employers.

One of the five has left the work in the plant because of personal difficulties.

Subsequent to the placement of the first small group in open industry, two further groups are in the process of preparation, organization and consolidation:

1. A mixed group, mostly girls, who, after adequate training will be placed as a group to work as nursing aides in a rehabilitation hospital for the physically disabled;

2. A mixed group of individuals who have physical handicap(s) in addition to their mental handicap, e.g. cerebral palsy, epilepsy, and who are being trained to work together as an industrial unit, will work together in assembly work, in a sheltered setting but on a co-operative basis.

This project is almost completed. The findings up to now have reinforced the findings and conclusions from the previous research study in an agricultural setting. When the retarded acquire a sense of belonging through the use of a "group milieu approach", motivation for work is developed, a zest for living is apparent, behavior is improved and, despite the severe limitations, positive rehabilitation can be achieved.

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The Impact of Early Education on the Mentally Retarded of a Low Socio-Economic Origin

Youssef Karoui

Abstract. A project in early compensatory education for alleviation of mental retardation is described. Results for both experimental and control groups indicate regressive phenomena after cessation of programs of stimulation. The process of interiorization is suggested as necessary for retention of language and other skills.

Several famous authors have, since the beginning of the century, shown the relationship that exists between intelligence and socio-economic level. Among such authors, we may mention: Binet (1910) Hoffman (1914) Yerkes and Anderson (1915), Bridge and Coler (1917), Ralston (1919) and Tarman (1925, 1928). All these investigations agree on one point: the mental level varies according to the socio-economic level, and the percentage of mentally handicapped is higher in the most depressed environments.

For about 10 years now, we have witnessed a renewal of interest in this same topic which is formulated not in socio-economic terms, but in the socio-cultural terms contained in the works of sociologists, linguists and especially in the research studies of Bernstein (1915). The solution to the problem has been formulated in terms of "compensatory education," "early education" or "democratization of teaching." The content of these different concepts is not always well-defined and varies considerably from one author or one country to another. (Cf. Rapport du Conseil de l'Europe, held on September 1971 at Strasbourg, France, where the expression "compensatory education" is often used to designate the education of those children who come from economically deprived population groups, whether before or during the scholastic period). We use the expression "early education" to designate an education starting from earliest childhood and having the following aspects: (a) a systematic evaluation of the deficiencies or alterations in the child-growth since the first year after birth; (b) a corrective intervention affecting the deficient aspects that have been recorded; and (c) a progressive and sustained stimulation of each child's ability. We are dealing, therefore, with a special type of education which is different from the classical pre-school education in its approach, therapy and effect as well as by its early intervention.

Such a definition may raise a series of side problems, for example: the controversy between the advocates of a spontaneous, or non-directive approach and those who choose a more interventionalist and more specific or systematic education. A second problem would be the choice of the right moment to give the early education; if we intervene too early, we will run the risk of creating irreversible problems, and if we intervene when the child is four or five, it will be too late. Another problem is that of the permanency of the progress recorded after an early intervention. Some authors such as Bereiter and Eugelmán (1966) have stressed the regressive effect recorded on some children just after the discontinuation of the psychopedagogical assistance. In spite of such various problems that need to be looked at in these sessions we think that a clear and operational definition of early education needs to be specified in every educational program for handicapped children.

I would like to present to you our experiment in preventing mental deficiency by using an early education program. After the creation of 10 centers that are essentially re-educational and vocational training centers, our National Association (Tunisian Union for the Mentally Handicapped) has, since November 1972, started a new phase, the start of a longitudinal pilot experiment (financed by the United States State Department) with three objectives:

1. To prevent retardation due to socio-economic factors and to increase the educability of a group of young, slightly and moderately retarded children;

2. To train about 30 specialized teachers;

3. To evaluate the educational techniques used in the project.

The duration of the project will be from 1973 to 1978.

Twenty children for the control group and twenty for the experimental group were selected from a sample of 100 low-income families in the Tunis region. Screening was by means of a socio-economic survey in the homes, intelligence tests, and medical examinations. Chronological ages of children at admission to the kindergarten was 2 years and 3 months. The working hypotheses are:

1. The educable mentally retarded children without organic disorder are able to remand their retardation if they are submitted to intensive education at an early age;

2. The variable of maternal intelligence is the best single predictor of the level of intellectual development in the offspring.

Screening Criteria include: Mother's IQ (30), and unfavorable socio-economic level implying at least one illiterate parent and an annual income of fifty Tunisian Dinars per capita, an IQ of 65-85 for the child, who must be free of organic disorders or pathological complications, chronological age at admission to the kindergarten of two years and several months, and place of residence in the low income peripheral districts of Tunis (Mellassine, Djebel Lahmar, Le Kram, Cite Bousselsla).

The results of the evaluation of mothers are listed in Table 1.

Table 1 – Evaluation of the Mental Development of Mothers Using Raven's Progressive Matrices

Tests	Number of individuals	Average age	Average score	SD
P.M. 38	77	32	18.8	7.93
P.M. 47	63	33	15.3	6.14

P.M. 38: Raven's Progressive Matrices (1938)
P.M. 47: Raven's Progressive Matrices (1947)

A diagnosis of mental deficiency is obvious if these results are compared to Western standards. The same conclusion is reached if they are compared to North African standards.

In addition, 72 women took the WISC performance scale test and scored an average performance intelligence quotient (PIQ) of 54, with a variation from 40 to 80 and a standard deviation of 12.88.

The results of evaluations of the pilot experiment are summarized in Table 2.

Table 2 – Evaluation of the Mental Development of Children Using the Bayley Test July 1973

	Average age	Average IQ	IQ Variation	SD
Test Group	23 mos.	68.55	49 to 84	7.61
Control Group	25 mos.	68.83	55 to 81	7.76

We counted 56 children in some ten families of the experimental group, and 69 children of 10 other families of the control group. We had planned to administer the Raven's PM 47 to all children over five years of age. But we were able to contact only 29/69 in the 10 families of the control group and 27/56 in the other 10 families. If we add to this the children followed from the beginning of the project 10 in the control group and 11 in the experimental group, since one family had twins), we thus have: 39/69 children tested in one-half the control group, or 56.5%, and 38/56 children tested in half the experimental group, or 67.8%. The results of these tests are summarized in Table 3.

Table 3 – Testing of the Siblings of the Two Groups

Experimental group	Average age	Average raw score
Number of retarded children 5 years = 9	10.6	8.55
Number of sub-normal children 5 years = 5	10	14
Number of normal children 5 years = 6	12	22.5
Control group		
Number of retarded children 5 years = 12	12.7	12.33
Number of sub-normal children 5 years = 8	10.3	14
Number of normal children 5 years = 9	10.7	17.4

Considering the half tested by the project, we observe that:

1. 22 of the 39 children tested in one-half the control group are mentally retarded (56.4%). We referred to the Moroccan scale drawn up in 1966 by Pitt, Weisberg and O'Donnel.

2. 20 children of the 38 tested in one-half the experimental group are mentally retarded (52.6%).

3. 20.5% of the siblings in the half of the control group tested so far are on the borderline of retardation, if reference is made to the Moroccan scale; while 13.15% of the siblings of the half of the experimental group are on the borderline of slight retardation.

But, if we refer to the American scale of Raven (1956) we get: 56.4% + 20.5% = 79.9% mentally retarded children in the half of the control group and 52.6 + 13.15% = 65.7% mentally retarded children in the half of the experimental group, which already confirms the results of Dr. Heber and our second hypothesis. In any case, we are continuing the testing of the siblings in the two groups of study.

We have chosen from Heber's (1971) Milwaukee Program (The Infant Intervention Program), the P.A.C. (Progress Assessment Chart), and from Cunzburg, certain tests of control to which we have added other tests inspired by our own program of activities. Major progress was in fine mobility and in eye-hand coordination. The rate of improvement was between 40% and 50% for the following activities: screwing, lacing, unfolding, and alignment; it was

between 85% and 100% for the following activities: folding the sheets, unlacing, spindle rolling, and seriation of objects according to size.

Discrimination of colors first involved objects of the same color and shape, and then objects of the same color but different shapes. In 1973-1974 the evaluation did not take into account verbalization, while that of 1974-1975 required the use of the vocabulary corresponding to the different categories of discrimination (color, shape or size). In June 1974, the discrimination of red, blue and yellow was achieved by 50%, 25%, and 0% of the students respectively. In June, 1975, the same test (verbalized) was passed by 100% for red, 100% for blue, and 85% for yellow. The discrimination of two qualities combined (color and shape), which was impossible in June 1974, was acquired by 17 children out of 20 (85%) in 1975.

Differentiation of round and square shapes went from 75% and 20% respectively in June 1974 to 100% in June 1975. The learning of large and small dimensions had improved by 40% and 35% by 1975.

The space orientation examination shows an improvement in space orientation varying from 15% to 100% for the tests taken as a whole. It should be mentioned in this respect that most of the children were capable of carrying out one or two errands at their neighborhood grocer's and of recognizing a large part of the school bus itinerary.

In November 1973 three children out of 20 pronounced three to four identifiable words; the others emitted certain difficult-to-understand sounds and phonemes. In February 1974 35% of the children had arrived at semi-structured language — sentences of three to four words of the "want to drink" variety; five other children (25%) were still at the level of the word sentence by June 1974-June 1975. We note that the important improvements bore essentially on the following syntactical elements: adjectives, pronouns, adverbs of time and of quantity, and the interrogative, negative and imperative forms.

By November 1975, starting right from the beginning of the school year (8 October 1975), all the teachers mentioned to us a general drop in language acquisitions in comparison with those recorded in June 1975.

We thus undertook a reevaluation, by recording five to 10 minutes of spontaneous speech during the recreational activities.

The gaps in language bore on the following elements: the frequency of adjectives had fallen by 25%, the frequency of adverbs of time had dropped 15%, the frequency of adverbs of place had regressed 5%, the frequency of adverbs of quantity had fallen by 35%, the frequency of interrogative forms had dropped 25%, and the frequency of imperative forms had fallen 10%.

The experimental group thus gained 15 IQ points in the first year and 19 IQ points in the second, while it had regressed 8 points after the three months of summer vacation.

The control group had progressed by five points in the first year and by six points in the second. It also regressed 10 IQ points during the summer vacation.

It should be mentioned that most projects in early education or compensatory education aim much more at showing the improvement in the performances of the experimental groups than in analyzing the regressive phenomena which appear after the cessation of the programs of stimulation. It is curious to note, in this respect, that the two symposia relative to the early education of underprivileged children held in Europe (from 24 to 28 September 1973 in Gand, Belgium, and from 28 January to 1 February 1974 in Jullouvile-les-Pins in France) at no time referred to "regressive phenomena." It is true that our school vacation is longer than it is in Europe, but so far as we know it has not yet been proven that the gains made during the stimulation programs will be retained after the cessation of the stimulation. This is why, in this report, we give great attention to the analysis of the slight regression we have just recorded.

Analysis of the results of the experimental group using the Gesell test revealed to us that the items (for children aged 4 and 5 years) which were most frequently failed were the following: copying a square, 61% failure; copying a triangle, 66% failure; counting 3 or 4 cubes, 61% failure; and completing 13 verbs of action, 27% failure. Thus, it is the activities of an academic nature which are most greatly affected by the summer regression.

How is it that certain sectors of development are consolidated and even progress during the vacation period (socialization and motor skills) while others are blunted (school activities)? First, superficial explanation would tend to incriminate the family environment, which does not reinforce the school activities. The entire compensation program is designed to neutralize the effect of this environment. We think that this explanation is inadequate, however, for we have noted that certain school activities are not touched by the regressive phenomenon, such as enumeration on the image, copying a circle, repetition of three figures or 12 syllables, and description of images.

Moreover, the regression of the syntactical elements of the spontaneous language of our children seems to confirm a thesis, relative to the impact of the "restricted code" of the deprived classes, in comparison with the "elaborate code" of the middle classes. This theory, however, does not seem to explain the regressive phenomenon we have observed. In fact, the idea of "code," borrowed from information theory, implies a one-to-one correspondence between the two linguistic systems invoked. But it has not yet been proven that the child between the ages of three and six manages to establish this correspondence, especially when the relation of this correspondence is not a relation of equivalence, but rather "a relation of opposition" (precise vocabulary — imprecise vocabulary, short, grammatically simple sentences or long, grammatically complex sentences).

We prefer to invoke a theory of "interiorization" which explains more completely the mechanisms of intellectual learning and development. The concept of interiorization has often been neglected by researchers, because it refers to mental processes with which it is difficult to experiment.

Table 4 – Development of Mental Level

	July 1973		June 1974		June 1975		November 1975	
	IQ	SD	IQ	SD	IQ	SD	IQ	SD
Experimental group	68.55	7.61	83.65	6.53	103.10	6.6	95	8.69
Control group	68.83	7.76	74.4	5.70	80.52	6.9	70.46	7.39

Some prefer to give it the term "assimilation", others the term "competence" (McNeill, 1966), in opposition to performance, and still others advance the term "integration" (Weksel, 1965) or "profound structure" (Chomsky, 1968). Certain behaviorists prefer to put the process of interiorization in quotation marks, or else they measure it indirectly by the corresponding "adopted behavior." But a behavior may be adopted by various means: by imitation, by conditioning, by trial and error, or by logical deduction. It therefore seems to us that so long as the mental mechanism by which the child arrives at interiorizing any piece of information has not been clarified, a major problem of the phenomena of intellectual learning and development will have been evaded. In fact, as Weksel (1965) states very well, "Our knowledge of the way in which imitation operates in the learning of syntactical structures is fragmentary, to say the least. What little we know serves negatively, in the sense that it points up the inadequacies of the approaches to the problem," and he adds later, "We know nothing of *this integration*. Current psychological theories are not yet capable of giving an explanation for it."

Most of the recent theories explaining linguistic learning seem to confirm the classic model of this learning, according to which language necessarily passes through three phases: reception, then interiorization, and lastly emission (or expression). The works of Belluzi, Brown and Trader (1963) on the language learning of 12 children aged between 37 and 43 months, have shown experimentally that "comprehension *precedes production* in the 3-year-old child."

Without wishing to engage in a discussion of this conclusion, let us nonetheless point out that our observations of the language of the average and slightly retarded children of our experimental group have shown us times when there can be a linguistic learning which calls into play solely the receptive and the emittive phases. Thus, for example, our children were able, in May-June 1975, to learn two songs in the French language, obviously without understanding their meaning. Their forgetfulness was almost total in October 1975. Thus, we think that for there to be durable and integrated learning, there must be interiorization. We do not define interiorization as "the facility with which one expresses his ideas using linguistic signs" (McCarthy, 1964), but rather as a process of "multiform assimilation" of the elements being learned, which calls into play an entire system of "semantic analyzers," similar to the sensory analyzers. This definition of interiorization calls for some clarification. We use the term assimilation in the physiological sense in which it consists in transforming the food ingested and in storing it in several forms of derivative products. The term semantic analyzer also refers to the psycho-physiological idea of sensory analyzers. In fact, it has been known for some fifteen years, and particularly since the works of Cuberina that the vowel "i," for example, can be "perceived" as "u" between 150 P/S and 300 P/S, as "o" between 300 P/S and 600 P/S. Similarly, nothing prevents us, theoretically, from assuming the existence of semantic analyzers which modify the significance of a single word according to the position it occupies in the sentence. Research on generative grammar is in fact oriented in this direction.

For this reason, we propose the following model (Figure 1) to diagram the phenomenon of regressive learning which we have observed, and to consolidate the compensatory education of our children.

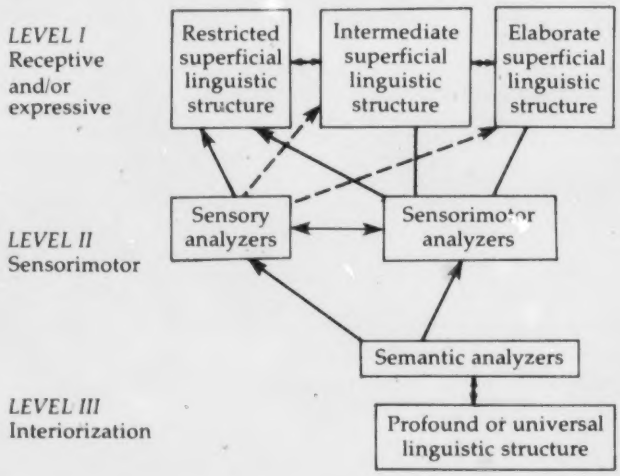

Figure 1:

EXPLANATORY MODEL OF LINGUISTIC LEARNING

The system of semantic analyzers would include the following eight categories of analyzers (Figure 2): syntactical analyzer, analyzer of similarity, metaphorical or symbolic analyzer, egotistical analyzer, terminological analyzer, dissonance analyzer, analyzer of conformity, and other-directed analyzer.

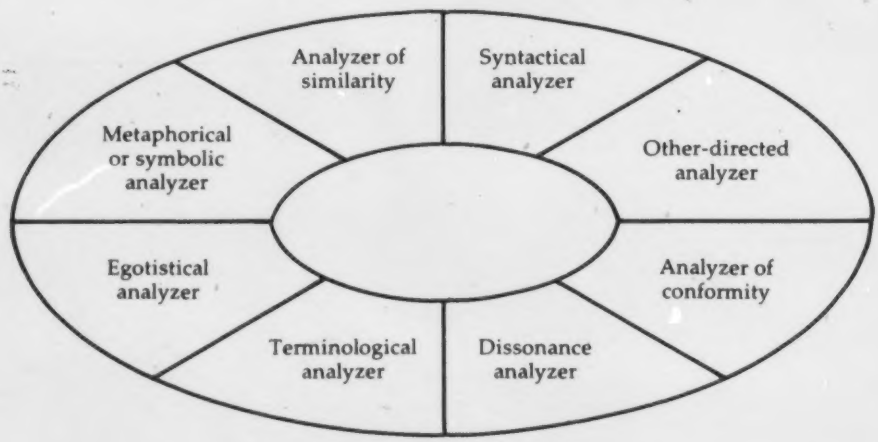

Figure 2: CATEGORIES OF ANALYZERS

The first two semantic analyzers are those which we call the egotistical analyzer and its complement the other-directed analyzer (or sociotiste analyzer). Several examples tend to show us that these two analyzers function right from the beginning of the stage of vocalization. In fact, when the infant begins to emit sounds, he is not only exercising his organs of phonation, of "playing with his voice;" he is also exercising his egotistical and other-directed analyzers, in the sense that he modulates his voice as a function of the intensity of his needs and of the effect of such a modulation on those around him. Should there be a defective decoding or prolonged lack of comprehension on the part of those around, there will be a disorder either in the egotistical analyzer, as in the limited case of psychotic language or of certain states of mental alienation, or of the other-directed analyzer in which each word or phoneme risks being interpreted differently by those around, obliging the child or the adult to confine himself to muteness. Another example which illustrates the existence of these two analyzers is that of underprivileged children who make alternate use of a dialectal or an academic language, depending on whether they are speaking to the children of their neighborhood or to the teacher.

Some of our children have a tendency to use the intermediate sound "Ka" for "ca," a consonant of the Tunis dialect or the sound "ga," a consonant of the demotic dialect. As for the categories of symbolic analyzers and analyzers of conformity, we may say that the first operates on significant appearances, while the second operates on concrete reality.

Certain metaphorical expressions such as "the flower of age" or "may my eye not wound you" are difficult for the children to understand, as they have a tendency to decipher them literally and do not yet have a large experience of semantic decoding. Around the age of three to four years, on the other hand, they are capable of decoding several phonetic symbols such as the phonemes of the superlative or the diminutive. One of our children stated one day that "papa has bought cabochya" to say papa has bought a ewe. In fact, the suffix "ya" often represents the phonetic symbol of the feminine, e.g. "sourya," "farachya," "ibaya," etc.

The function of the similarity analyzer is the analysis of synonyms, of congruent words expressing a relation of semantic agreement without being real synonyms, as well as the analysis of homonyms (phonetic similarity) or of rhymes. Phonetic similarity often serves as a support to semantic similarity. This explains why young children of three or four are capable of producing entire poems but incapable of repeating four figures.

The dissonance analyzer plays the role of phonetic and semantic decoding simultaneously. During a psychological examination, I once asked a slightly retarded 12-year-old to replace the first word of the following sentence: la boule rouge roule (the red ball rolls). His reply was "le bouc rouge roule" (the red goat rolls). (He was proud of showing that he knew the word for male goat.) In this example, it is the analyzer of phonetic similarity rather than analyzer of semantic dissonance which was functioning. We could add other examples of expressions which are dissonant for mentally handicapped people, such as "entree interdite" (no entry), "vitesse limitee" (speed limited), "service non compris" (tip not included), etc.

As for the role of the syntactical analyzer, it has, long been held that *genetically*, the installation of the syntactical structures of the language *precedes* the acquisition of a correct morphology, of an abundant vocabulary, or of perfect pronunciation. Our own investigations agree on this point.

One should always ascertain whether the different forms of proposed activity interest the child and engage his active participation, otherwise there is the risk of bypassing the process of interiorization. The application of the model proposed necessitates a good capacity for animation and a fairly clear knowledge of the development of language and intelligence.

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PART III

Training Programs And Sheltered Workshops

Applying Research to Practice in the Field of Vocational Rehabilitation

Edward Whelan

Abstract. Adult training centers provide pre-vocational training in the form of basic work skills. Basic perceptual-motor training is given by means of a "Work Skills Training Kit" which presents a profile of perpetual-motor skills and evaluates present abilities and further training needs. The use of the illustrated Vocational Inventory as an occupational knowledge and interest inquiry for severely retarded persons is also described.

The main community-based service for the rehabilitation of mentally handicapped adults in Britain is provided by the Adult Training Centre (ATC). Trainees attend on a daily basis; the majority live at home with their family, and some have accommodations in hostels or flats. The ATCs cater mainly to moderately and severely mentally handicapped adults, though a small number of mildly mentally handicapped adults can also be found in every ATC. A recent national survey of ATCs (Whelan & Speake, 1976) has shown that their general aim is to develop the trainees' work habits, work skills and social competence, and wherever possible to direct them to sheltered or open employment. The major emphasis in training, in the area of work skills, may be understood in terms of the historical development of ATCs, under the influence of a number of factors including: the official guidelines provided, the background from which many staff are selected, and the general values of society itself, reflected through the views of service providers, parents, and of mentally handicapped individuals themselves. Nevertheless, actual employment success is very low indeed (less than 5%), despite reliable staff estimates that over 11% of trainees could succeed in open employment and a further 25% in sheltered employment if places were available.

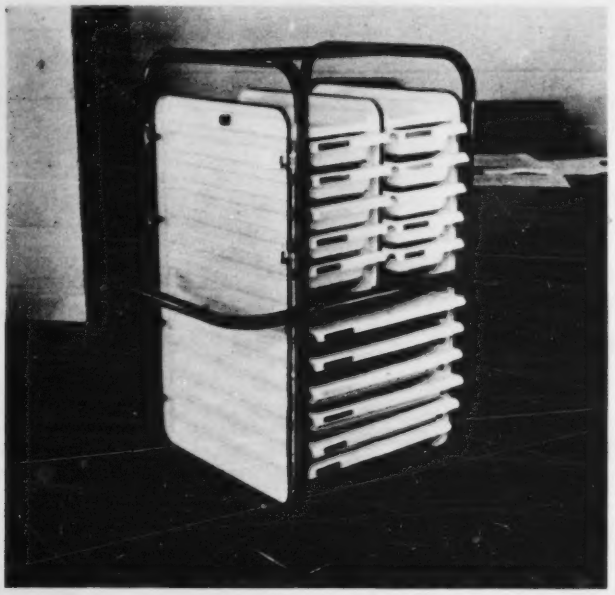
There are obviously many factors which influence the outcome of a training program when this is measured in terms of employment success. Many of these factors, for example the local level of unemployment, are largely independent of the training center, even though its staff may be collaborating closely with placement officers. For this reason, ATC staff agree that they should concentrate initially on improving their training programs. In addition to a growing awareness that the ATC should become more "educational," using that term in its broadest sense, staff are keen to become more effective instructors and to apply more systematic methods in their everyday work. It is important that research should be shown to be relevant by focusing first on areas which are of immediate concern to staff, and for this reason our team has mainly concentrated on work skills training.

Of those trainees who are successfully employed, only about one out of three enter a job which is similar to anything they have experienced during training. The Survey also revealed that little was known about the job interests of trainees. A study of the skills and the equipment available within the ATC, and the way in which its daily schedule is organized, suggests that it is best fitted to provide a general pre-vocational form of training rather than preparation for specific jobs. Included in this should be such basic work-skills as recognition and use of basic tools, manual dexterity and co-ordination, ability to follow instructions, attention to safety, development of good work habits, together with social skills specifically related to the work situation (for example, cooperation, team work, and appropriate response to supervision, the latter which should be dealt with by the planned programs of social education). I wish to focus here on the work skills themselves. In a previous review of this topic (Whelan, 1973) the types of training situations which were made available were listed as follows: (a) in-placement training on a specific job, (b) within-the-unit job experience, (c) simulated job-training, (d) synthetic jobs, and (e) perceptual-motor training devices.

The range of work available within any training center is necessarily restricted and when in over 89% of cases this consists of sub-contract work for local industry, the result is an inadequate, unstable, and unstandardized form of training known as the "work-sample" approach. A major failing of this approach is the lack of attention to content, and hence skill requirements, especially in view of the many studies of transfer of training.

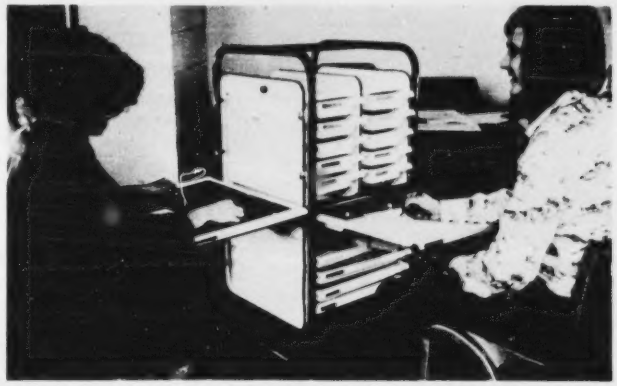
Attempts to develop a comprehensive scheme of basic perceptual-motor training, a "Work Skills Training Kit," commenced in 1970. The results of applying the first version have been very encouraging; recent collaboration with an industrial designer has resulted in the new "Work Skills Training Kit," the prototype of which has just been built.[1] The aim was to design a mobile piece of equipment which would enable all components of the kit to be presented in turn and stored when not in use, with space for further items to be added later where necessary. It should be attractive in appearance, suitable for use in workshop or even classroom settings, and include a certain degree of automated recording of performance. The result is shown in Illustrations 1 through 3.

The various components of the kit have been determined as a result of an intensive review of the elemental operations which are to be found, in various combinations, in any job. Important influences in this analysis have been the various pre-determined motion-time systems which are widely used in industry, the consensus concerning items included in many scales for assessing work skill, and the particular areas of performance which research has shown to present difficulties for many retarded individuals (Grant, 1971; Grant et al, 1973, 1975; Whelan, 1971, 1973, 1974). The theoretical basis of the approach is supported by many studies of transfer of training which have shown that transfer most readily occurs when the initial learning task and the transfer task are quite similar (Drew & Espeseth, 1971). The Work Skills Training Kit should be used by practioners to supplement the work-sample approach.



1. **The work skills training kit:** a mobile cabinet which provides both storage space for materials and work stations for instructor and trainee.

The emphasis is on training, although the distinction between assessment and training is no longer clear-cut in practice. The kit provides a valuable profile of perceptual-motor skills together with measures of other relevant skills (decision-making, memory for sequences, and specific discriminatory ability). It provides both an indication of present abilities and of further training needs, and should not be used to make predictive inferences about an individual's ability to respond to training.



2. **The work skills training kit in use.** The trainee's performance is scored and timed at the end of each training session.

The performance norms (developed from a representative sample of trainees in Adult-Training Centres) will make use of the shape of an individual's performance curves for each task presented on several occasions. The absolute value of their performance, in relation to acceptable industrial standards, will be readily afforded by reference to the standard time for each task, defined by a Methods-Time Measurement (MTM) Analysis. This standard time will appear as a horizontal line on the scoring sheet provided for each task.

In order to obtain some measure of transfer, the Work Skills Training Kit includes two composite tasks for each of which a pictorial programmed manual is provided. The trainee is taken through the first manual by the instructor who shows him how to perform the task, using the various components and carrying out the necessary operations in the order and manner illustrated in the manual. Once the trainee has learned to use the manual in this way, the instructor replaces it with a second manual, and a new set of components, and monitors the trainee's attempt to complete this novel task solely by reference to the pictorial manual. If trainees are able to acquire this self-instructional strategy, then the implications for the design of new manuals, both for use in the workshop and in the social education area, are considerable. Once we are sure that each trainee is capable of performing the basic operations which are the building bricks of any task, surely an important function of prevocational training, then we are able to present him with tasks which make successively greater demands on his skills and allow progress to be reflected by his movement through the various departments in the unit — from the induction workroom to the most advanced workroom where more specialized job training is available prior to placement in employment. Successful techniques of training on real tasks have been described by a number of workers (Crosson, 1969; Screven, 1971; Gold, 1968, 1969, 1972, 1974; Tomlinson, 1976).

The Survey of Adult Training Centres showed a need for staff to learn more about the job knowledge and job interests of trainees. Where staff do enter into conversation this is usually in a group setting and though it plays an important part in establishing friendly relationships, chatting is no substitute for purposeful and systematic attempts to involve the individual, listen to his ideas and encourage him to express them where difficulties are found. Staff concerned with the vocational planning, training or job placement of indi-

[1] The author acknowledges the contribution made by Mr. T. Lloyd of the Department of Industrial Design, Manchester Polytechnic.

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viduals need to obtain systematic information about their interest patterns in the many unskilled and semi-skilled jobs which are, or could be made, available to them.

Although a large number of sophisticated tests of vocational interest are available for use with non-handicapped individuals, these usually require a high level of reading ability and comprehension. A small number of tests of vocational interest are available for use with mentally handicapped individuals, including the *Vocational Interest and Sophistication Assessment Test* (Parnicky, Kahn & Burdett, 1971) and the *Reading-Free Vocational Interest Inventory* (Becker, 1973). However, all the tests known were designed for use with borderline or mildly mentally handicapped adults. Attempts to apply these to more severely handicapped adults resulted in the conclusion that a new instrument is required when working with this group. In addition, it was found that the use of line drawings introduced some ambiguity, and the provision of fewer occupational categories for females than for males provided unnecessary limitations in some tests.

It was for these reasons that the *Illustrated Vocational Inventory (IVI)* was designed.[2] It is a reading-free instrument which provides a framework for staff to explore the vocational knowledge and interests of moderately and severely mentally handicapped individuals. The *IVI* is based on 11 areas of work (shown in Table 1), a common list of occupations to be used both with males and females: Domestic Work; Simple Factory Work; Industrial Laundry Work; Food Service — Catering; Horticultural/Agricultural Work; Animal Care; Local Services; Patient Care; Garage Work; Office and Shop Work; Building and Allied Trades.

TABLE 1

OCCUPATIONAL INTEREST INQUIRY

Occupational Area	Code
1. Domestic Work	D
2. Simple Factory Work	SF
3. Industrial Laundry Work	L
4. Food Service — Catering	F
5. Horticultural/Agricultural Work	H
6. Animal Care	A
7. Local Services	S
8. Patient Care	P
9. Garage Work	G
10. Office and Shop Work	O
11. Building and Allied Trades	B

Several considerations led to the choice of the list of occupational areas. A survey of research and reports concerning jobs held by mentally handicapped persons, for example, that were carried out by Collman and Newlyn (1956) indicated a wide range of possible occupations. The National Survey of Adult Training Centres also provided information concerning the range of jobs successfully held by former ATC trainees in open employment.

During pilot studies (Reiter, 1975), it was found that photographs are more effective in stimulating verbal responses from trainees than line drawings. The *IVI*, therefore, is based on a large number of monochrome photographs. Large numbers of photographs were taken of people in the course of their normal work; 11 representative photographs were selected as representing each occupational category. One photograph is used in the occupational knowledge inquiry and ten in the interest inquiry.

The occupational knowledge inquiry consists of 11 large photographs, one for each of the work areas listed, with an extra photograph at the beginning to serve as a practice example and for subsequent reference. Six basic questions concerning general aspects of the work are asked about each picture in turn. The occupational interest inquiry consisting of 110 photographs (ten representing each work area) involves a forced-choice procedure. Every occupational area is matched with every other one, resulting in 55 paired photographs, each on a separate page. (See Table 1).

3. **An example of a stimulus pair** presented during the occupational interest inquiry of the *Illustrated Vocational Inventory*.

The individual is asked to indicate which of the two tasks depicted by the photographs he would prefer. In five of the ten cases the picture representing a particular occupation appears at the top, and in five cases at the bottom, of the pair, to overcome any possible response bias.

The *IVI* has now been administered to over 400 trainees and raw scores have been converted into percentile distributions for males and females separately on the two inquiries (Tables 2-5).

Measures of validity and reliability have been carried out on the *IVI*; a handbook has been prepared, and the new instrument is now in process of publication.

When applied to children in their final year at special

[2] The author wishes to acknowledge the co-authorship of Dr. Shunit Reiter in producing the *Illustrated Vocational Inventory*.

school, it was found that the *IVI* knowledge inquiry would need to be supplemented by more detailed questions if it is to become applicable to mildly handicapped school leavers. This inquiry was found, however, to be suitable for the severely mentally handicapped school children, most of whom will proceed to the ATC at the age of 16 years. The occupational interest profile of both groups of children fell within the average range obtained by ATC trainees.

TABLE 2

IVI OCCUPATIONAL KNOWLEDGE — MALE

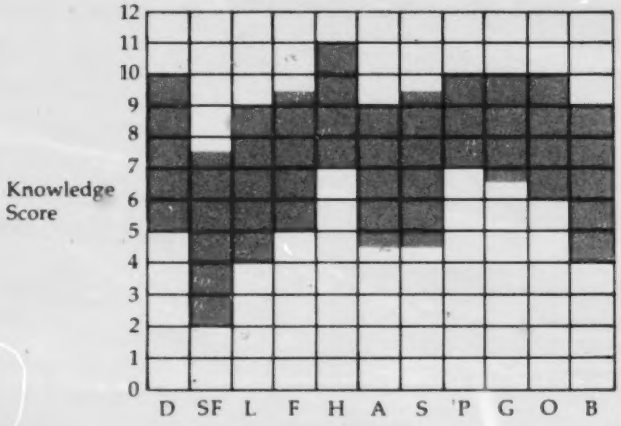


TABLE 3

IVI OCCUPATIONAL KNOWLEDGE — FEMALE

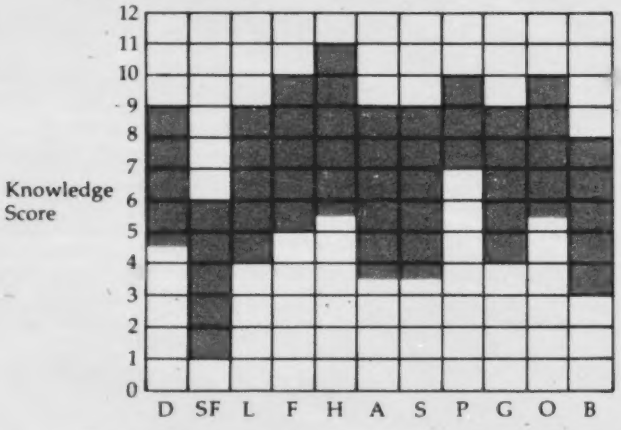


TABLE 4

IVI INTEREST PROFILE — MALE

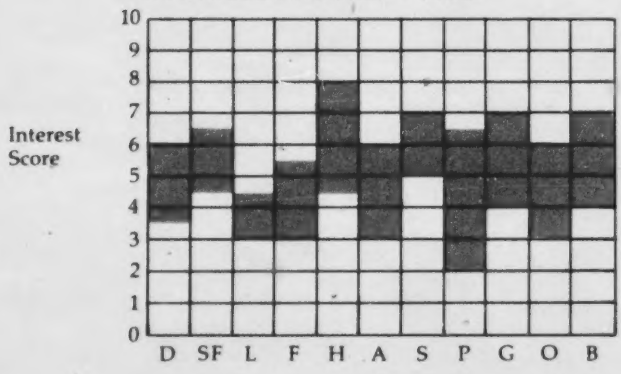
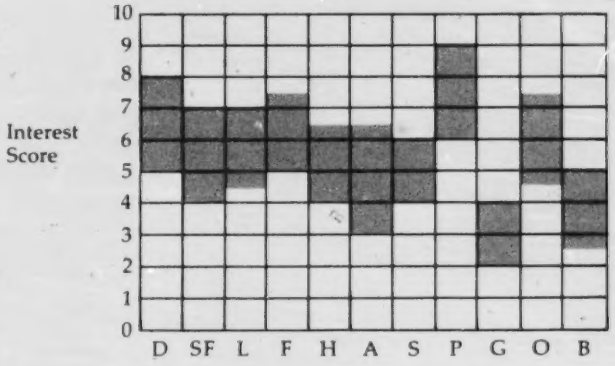


TABLE 5

IVI INTEREST PROFILE — FEMALE



Both of the techniques which have been described in this paper are intended for use by practitioners. One of the aims of the research team has been to enhance the professionalism of ATC and associated staff by giving them a share in the skills which have often been regarded as the monopoly of more highly trained professionals, such as psychologists. We believe that staff who have been taught how to use a new technique will be more likely to incorporate that area of training within their daily program and to experience an increase in job satisfaction which will ultimately benefit those whose future depends upon their professional skills and standards of practice.

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EDWARD WHELAN obtained his Ph.D. at Sheffield University in 1968 following a study of perceptual processes and cerebral dominance. He subsequently trained as a clinical psychologist and then joined the staff of the Hester Adrian Research Centre for the study of learning processes in the mentally handicapped at the University of Manchester where he is now Director of the "Habilitation Research Project" — a five year programme of research supported by the Department of Health and Social Secretary. His team has just completed the first National Survey of Adult Training Centres and is now engaged in an attempt to develop the services provided for mentally handicapped adults living in the community. He has also been jointly responsible for a survey of work centers for the physically handicapped and for an evaluative study of all the Department of Employment's work preparation courses for mildly handicapped adolescents.

Work Training for the Mentally Retarded

Tormod Larsen

Abstract. Sheltered workshops and small living units for the mentally retarded are described. The program for the rehabilitation of the mentally retarded emphasizes self-confidence and basic living and working skills. A plea for recognition of the basic value of every human being is made as the basis for the acceptance of the mentally retarded into society.

The mentally retarded are a good working power if we want to use them. It is up to us to decide if they shall be prevented, hidden, or forgotten, or if we shall make them real workpeople. Do not forget that we have the authority to determine other people's fortune, and we are not allowed to abuse this authority.

There is no large difference between the mentally retarded and other people when we are talking about happiness in work. All people want to see the results of their work, and that means mostly to see other people buy and use their products. I am sure that real work for the mentally retarded means industrial, productive work which they can be sold. Some people smile a little and find our trainees childish because they are proud of their products. But, if we are allowed to be proud of our work, can the mentally retarded be considered childish in the same situation? Does it depend on lack of respect for mentally retarded as dignified human beings?

In the beginning of the training period it is necessary to start with very simple work which we are sure they are able to do. It is the same for us. If we get work which is too difficult, we feel unsure. When we start at a low level, give them the opportunity to show what they can do, and do not exceed the limit for their ability to work, they perhaps will succeed in obtaining happiness and confidence in work. We can train every woman or man to do a job, either the mentally retarded or other people. But if we take only the work into consideration, we will fail. For all people, social confidence is a necessity to be able to work. Therefore, we must work out a program in activities of daily living (ADL) which must go hand-in-hand with job-training. To feel socially secure in the community is a necessity for improvement in work. Some people say, and truly mean, that to feel socially secure is necessary only for the mentally retarded. Shall we make a comparison? What about foreigners? How secure did they feel at first? How secure do they feel today? Are people able to fill a job now in their insecurity? The answer is up to all of us who have been disabled under strange circumstances. Thus, it is easier to understand how difficult it must be to handle new situations for the mentally retarded. Also we must have in mind that these people have been losers from childhood on, among friends, in the family, in school, everywhere.

What policy do we have in our negotiations with the factories for whom we do contract work? In our workshops in Oslo, we have no production, only contract work. In our policy we have as a basis that job completion earns a normal wage. On that basis we negotiate with the factories. We feel that it is very important to insure that our people shall be paid equally if they do the job. We are not salesmen of bad working power. The profit for the work which is done in our workshops is paid in wages to our trainees, and the working capital is paid 75% by the National Insurance Company, and 25% by the local authority. We have five classes of wages, depending on the trainees' productivity. Besides the wages, our trainees have their rent from the State.

In our workshop we have five different producing divisions, a storeroom and a small laundry, all together 70 working places. The different producing divisions have from 12 to 15 trainees, because we do not like big divisions. The work we do in the workshops is different kinds of packing, sewing of bed-clothes, different work with advertising material, pointwelding, and different kinds of assembling-work, some simple and some complicated. The main reason for our policy of small divisions is that we try to put people together who are on the same level of ability in work. We have had experience using the theory that the best trainees are of use in training the less skilled trainees. How do we like to work

together with colleagues who are more skilled than we are?

What is our aim with the trainees in work? Do we aim at employment in an open industry? We do not. Our aim is to increase their ability in work and their social function based on their individual resources. In spite of this, 45 of our former trainees are employed in full time jobs with normal wages. It is our policy that they shall earn the same as other people for the same job.

For those who are in charge, the pressure for results is felt from the outside, and for most people, results are what we can draw up in lines and curves. But, who can measure happiness? If happiness is being in good spirits, feeling secure, liking going to work, we shall be aware of that and not care about pressure from outside. In our experience it is very important that the mentally retarded who have jobs in open industry have a very stable and good living situation. This is necessary because it is not the work which gives them problems, but the social situation at their working place. Therefore, they have to be backed up socially every day.

How often do we compare our own difficulties with the new, strange situations the mentally retarded meet with? Do we do our best, and do we have the ability to understand these people's problems when they come from an overprotected situation into the working situation? Suddenly they must produce articles for sale in competition with others. Previously they have been making rugs, or something like that, quite unprofessionally. No one has given them responsibility in any situation, or the freedom to make their choice in what they want to do. We, with our authority, are responsible for making their education in work realistic by arranging the training in work and ADL-training and sometimes theoretical education to give them confidence in work, self-respect, the feeling of equality with other people, the happiness of dignity and the feeling of being worthy human beings. If we do this for the mentally retarded, we will succeed, and more important, the mentally retarded will succeed. In our experience this is the right way, not to treat, but to meet our trainees. I am sure that we are not the only ones with this experience, but it is easy to forget our own responsibility.

Our trainees are mentally retarded women and men in an age from 18 to 56, with an IQ from 35 to 60. Some of them have multiple handicaps such as cerebral palsy, diabetes or epilepsy. Some are hemiplegics, mute mongoloids or trainees with "nerves."

How would you like to have a label around your neck which classifies you? This classification is made by other people, based on your intelligence only, which tells everybody about your intellectual capacity compared with other people. Perhaps some would like this label, but I am sure that some of us would not like it. I do not really mean that the mentally retarded have a label around their neck, but in a way it is there. Generally people's worth is measured from their intellectual capacity and all other human qualities are easily forgotten. People usually look at a highly intellectually qualified person with admiration and accept this person without further ceremony as a valuable human being. We are a little afraid of criticizing this person because it is not our idea that she or he can be worthless as a human being. We, by virtue of our profession, should know about the qualities of the mentally retarded. Therefore we are responsible for giving them possibilities to develop their qualities and their self-confidence. But first of all, we must show them respect. Once in Norway I heard a speech given by a highly qualified person who said that research had been done which showed that the mentally retarded had a sociality of approximately 35%. I took the liberty to ask "35% compared with what or whom?" The answer was, "Of normal sociality," but they could not explain to me what normal sociality is. We need research, but not of this kind. I have mentioned these things to try to illustrate people's lack of respect for the mentally retarded as human beings.

In Norway people often ask us how we treat our trainees. For me, it is impossible to answer such a question, because I feel that we do not treat them, but meet them in the working situation, as we meet one of the staff. We do not treat other people, and to say we must treat mentally retarded is for me a discrimination.

In our workshops in Oslo, we offer the retarded different courses in reading, writing or arithmetic. All our trainees have had schooling for some years; during this schooling they have learned the subjects previously mentioned. Either they have not been able to learn this, or they have learned it but forgotten, because of lack of interest. In our policy we consider it a waste of time to take this up again, and I am sure that a large number of our trainees are ashamed to be grown up and go to elementary school for the second or tenth time. We must remember that they feel a pressure from their parents in these things, and we are not allowed to back up the parents. We shall give our trainees necessary backing. We only want them to be able to write their name and address, but if they want more education for themselves, we teach them in these subjects. Our courses last for 3 months and include:

1. Simple understanding of money;
2. What happens in society, in Norway and the world (here we mostly take headlines from the newspapers);
3. Rights and duties at their working place (our workshops);
4. ADL-activities of daily living.

When I say we teach them, it means we try. We do not succeed every time because it is difficult for the trainees to understand that they are grown up, because the mentally retarded in Norwegian institutions are considered as children from birth to death. To be respected as grown up is a new, strange and perhaps dangerous situation.

One of our instructors has only ADL-training. This has been a very important part in our training program. Usually our trainees are not used to taking buses or streetcars by themselves. The ADL-training starts with what we call city training. A small group, three or four together with the instructor, start with a walk a couple of times around the city, just to look around, and have a cup of coffee in a cafeteria. This develops further and ends with different, real tasks in the city. The program contains also all forms of personal hygiene, taking care of their clothing, simple household behavior, size of clothes, daring to go to a shop to buy something and refusing it when it does not suit in shape or color, telling them about money, telling them about rights, duties and responsibilities which they have, and practicing these subjects. The instructor is also responsible for the training-flat, which is not together with the workshops, but in an ordinary houseblock nearby. In this flat they get necessary training three times a week, three hours at a time. This training ends with a two-week stay in the flat, and during these two weeks the trainee is the owner of the flat, without any control by the staff at night.

The trainees also have their own board, with the members elected by the trainees, and they have board meetings which very often end with a desire for a meeting with me. At these meetings they have special matters they want to discuss. Most people smile a little at this, thinking, what can the mentally retarded discuss? I myself have been a member of several professional boards. I smile very much at all the stupid, silly, unintelligent arguments and questions I have heard in these meetings.

We have bought an old farm where we have training camps, 10-15 times a year, each for a week or two. It is vol-

untary for the trainees, and they have the responsibility for taking care of this farm: the house, the flowers, the lawn, the vegetables and most of the household. In their free time they can do what they want. At these training camps are nine trainees and two staff members. We have learned a lot about the trainees at the farm which we could not have learned under other circumstances. We have also learned a lot from the trainees. People are surprised when I say that we learn from the mentally retarded. I feel sorry for these people.

This program has the aim of training the trainees to become secure socially, and to obtain self-confidence. The social security and self-confidence go hand in hand with ability in work.

We can have many excellent programs; we can do what we want; but we will never succeed without an attitude towards the mentally retarded which shows that we respect them and accept them as human beings, valuable human beings. They must trust us. If we look at the mentally retarded with an open mind, we will find people who are and react quite like other people with only one difference, a lower intellectual capacity. Do it in another way, look at your colleagues. I am sure that you will find lazy or dirty people, or people coming to work late every day, people who do not pay attention to their jobs or behave in a bad manner. Do we react to that? Maybe, maybe not. One thing is certain, if we react, we do it in a different manner than we do for the same things when dealing with the mentally retarded.

Some months ago we opened a lodging house in an ordinary houseblock in a satellite town in Oslo, where six trainees of both sexes live together. We have four single rooms and a common dining room and common sitting room. There is also a small flat with its own bathroom and a small kitchen where a young married couple live. This couple can also use the common rooms if they want. We have two staff who make the dinner and some other household staff, but the trainees have their own duties in the household. When they have done their duties, they are free and can go and come as they want, and have guests. They must take care of their own guests.

In the future we have to break down the big institutions to smaller units, and must not build more institutions in the countryside.

In Norway, and I think in many other countries, human rights are spoken of, and a lot of resolutions are signed, and consciences are quieted. I feel that we should stop talking, stop making resolutions and start acting.

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The Nandanvan Project: A Demonstration Project on Rehabilitation Training

Kusum Wankar

Abstract. Placement results after a five-year training program at the Nandanvan School are summarized. Pupils were rejected from public schools on the basis of poor performance, were evaluated and monitored throughout vocational training and six months after completion of the project. Success in final vocational placement was limited.

In order to give you a clear picture of the project, it is necessary to have the background of the city of Nagpur and Nandanvan School. Geographically, Nagpur is situated exactly in the center of India. It is located on the border of Marathi and Hindi speaking areas, i.e., it represents two important language cultures which cover about 38.4% of the population of the country. If a single city locality is to represent North and South, Nagpur is the city of choice. Similarly, socio-economic features show that it represents the urban culture of this country.

Matra Sewa Sangh, the parent organization, is a voluntary body doing welfare work for women and children for the last 55 years in the fields of health, education and welfare. Besides this school (Nandanvan) it has 18 maternity homes, three Aux-N-midwifery training centers, old people's homes, an orphanage, a college of social work for women, a children's clinic, an F. P. clinic (urban and rural), a domiciliary health service, a blood bank, an immunization unit, a premature baby unit, and an ambulance service.

We established this school in 1960 when this was the only school for mental retardation in the whole of central India, except in Bombay. Now, many new agencies are coming up, but they are all private organizations, helped partly by government under social welfare.

The Nandanvan Day School has three sections:

1. Day care school for severely retarded,
2. Pre-vocational training center with residential accommodation for outsiders, and
3. Sheltered workshop.

During the project period of five years, we handled 204 clients aged 12 to 22 years with an IQ range between 40 and 75. All these clients came to us after they were rejected from the normal public school because of poor performance. There is no referral system. Selection was done by the usual procedure of parental interview; IQ testing; medical, social, psychological history taking and evaluation. Of 204 clients that we handled during a period of five years (an average of 80 per year) 50 had speech and hearing defects, 36 had orthopedic defects, 24 had eyesight defects, five had epilepsy defects, and only 87 had normal physique. Special mention must be made of epileptics, as we found that with proper medication, fits could be kept under control for long periods and the clients could be helped in rehabilitation.

Prevocational Training: The daily schedule is academic education for one hour in the morning from 11 a.m. to 12 noon and then pre-vocational training for the rest of the

time. Academic education includes the 3R's and other subjects which will be useful to the clients in their practical life. Music, games and sports are scheduled at the end of the day.

The work areas chosen for pre-vocational training were: (a) pounding, (b) cane work, (c) simple stitching, (d) sewing on machine, (e) knitting, (f) weaving on handloom (once the client is well trained in this, he is placed on the power loom also), (g) book binding, (h) cane work, (i) fret work, (j) cooking (especially for girls), (k) candle making, and (l) laundry.

Ongoing evaluation was carried out at different stages by our psychologist, social worker, and teacher team. Unfortunately, there was no vocational counselor available anytime and the post remained vacant to the last. Data were gathered on the clients' adjustment, at different levels of home, school and community situations, in regard to work habits, ability to work under stress, and relationships to peers and other supervisory staff. Sixteen did not show improvement beyond Activities of Daily Living (ADL), but the others definitely showed better performance upon completion of training.

Social Behavior of Clients: We all know that the IQ is not the last word on the ability of the client. Within the same IQ range, wide variations in social development can be seen. Social competence and resultant independence are more important. Parental influence, especially that of the mother, is an important factor in shaping the behavior of the child.

In order to assess our clients on social maturity we observed them in five areas:

1. Help needed in ADL (all could do it after completion of training).
2. Independence outside (only eight clients could not use public transport).
3. Ability to handle money (difficult to assess).
4. Assistance given at home (45 were helping at home willingly).

Vocational Rehabilitation – Final Placement Results:

1. Helpers in shop — 7
2. Hawker — 7
3. Service in factory — 11
4. Service as millhand — 1
5. Service in dairy — 2
6. Mechanic aids — 7
7. Teacher aids — 2
8. Hospital aids — 2
9. Attendants in office — 2
10. Coolie at railway station — 1
11. Handicrafts (cane work, weaving, etc.) — 9

Total 47

Thus, it could be seen that 23% of our clients could be employed in the open market and the same number could be employed in sheltered workshops. All the girls under training during the project period got married, but none of the boys had this chance. Out of 204 clients, only 99 could complete their training and earn in sheltered workshops. Out of this number, only 47 could find some job outside in the open market and earn some money (10 cents to a half dollar per day roughly). This was confirmed with a follow-up six months after completion of training.

The study of etiological factors assumes great importance with progress in our knowledge of understanding mental retardation (40.6% due to neonatal causes, 10.3% due to natal causes, 4.4% due to hereditary causes). The population explosion and growing difficulty in placement of the mentally retarded due to automation places more emphasis on the need for the preventive aspect of mental retardation in a developing country like India. The necessity of improving MCR services is again highlighted because of our acceptance of family planning as our national policy. Now we encourage parents to have small families with two or three children.

In order to train teachers, a curriculum has been drafted recently for undergraduate and graduate level teachers specializing in special education. Our state is planning to start special classes in public schools for such children who are mildly and moderately mentally retarded. This speaks of our respect for the mentally retarded person as a human being, and our aim to help him to have meaningful life.

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Vocational and Social Training for the Mentally Retarded

I. Skov Jorgensen

Abstract. The problems of the mentally retarded attached to vocational training in Denmark are discussed. The process of vocational and social training in sheltered workshops is detailed with supporting data comparing extra-and intramural groups. Training workshops provide pre-education for semi-skilled workers.

From the earliest possible moment after a handicap has been diagnosed, and adequate special pedagogical arrangements during pre-school-age and during school have been made, pedagogical-psychological counselling is essential and even often a condition of the handicapped's possibilities in social and vocational life.

The mentally retarded are a natural element of any population. Some mentally retarded persons are minus variants of

the general mental distribution; some are pathological deviants, others again are mentally retarded as a result of the social and environmental conditions in which they have to live. Consequently, mentally retarded persons are no special group which can or should be segregated, but are members of the society born with the same right to live, and with the same right to treatment as all other citizens.

A definition of the term "mental retardation" depends on the angle of approach, as there are no international diagnoses which are generally accepted. Mental retardation is different from a medical, a pedagogical-psychological, and a socio-administrative point of view. From a medical angle, mental retardation will often be confined to cases of organic origin, in this connection, a symptom. The Soviet Union uses the delimitation to describe "oligofrenia," a term which is being used there. Typical examples: mongolism, hydrocephalus, etc. In western countries, the term includes cases of other origin resulting in lacking, poor or no development which is owing to insufficient stimulation due to poor economic or social conditions. Thus, one can speak of mental retardation through environmental causes — socially or culturally deprived persons who function as mentally retarded. From an educational angle, mental retardation is limited to cases where specially arranged education programs are considered necessary during school age. From a social angle, mental retardation can be confined to persons who, due to dull intelligence or poor development, need special help and support to manage in the society.

The legal administrative definition of mental retardation, the most important one to initiate an adequate service form, refers to people who, due to poor mental development, need special help for their lifetime or for a period of their lives. Thus, the definition describes persons who need special treatment in a hospital, special education during preschool, and school-age, or special social service. The definition of mental retardation must always be relative.

Until the middle of this century one generally assumed that 80% of all mental retardation cases were of genetic origin, but concurrently with more exact differential diagnoses, many other specific causes of mental retardation have been detected. Today we believe in about 40% cases of genetic origin, a percentage which, most likely, may be reduced concurrently with improving techniques of detection. Because of the different definitions, it is impossible, even in countries which have developed a service system for more than 100 years, to state the exact number of mentally retarded; and it is even more difficult for the developing countries.

In Denmark we count approximately eight per 1000. Only one-half, or approximately four per 1000 adults, will probably be in need of special services. A rough conclusion on this basis is that school education for all retarded persons should have a capacity corresponding to 1% of a generation, and special vocational arrangements should be able to serve at least one-half of them.

With regard to attitudes towards and treatment of the mentally retarded, our country has developed a philosophy of normalization. This principle does not by itself stand for anything else other than the idea that the handicapped shall have the same rights and possibilities as other citizens. What is aimed at is not "normality" but "normalization." Normalization means acceptance of the mentally retarded with their handicap, and offering them normal living conditions, i.e., offering them the same conditions as are offered to other citizens, inclusive of treatment, education and training adjusted to the handicapped person's individual need for the purpose of enabling him to develop optimally. This basic philosophy results in the fact that the mentally retarded person has the right and the obligation to work, if he is at all able to work. On the other hand, society has the obligation to help the person in question to be able to work and to live as independently as possible. Normalization also means that the mentally retarded individual, to the greatest possible extent, should live, work, and have leisure time together with other citizens; in other words, it means integration.

These optimistic viewpoints, which can be confirmed from Scandinavian experiences, presuppose a developed school system providing the mentally retarded with general and special education. Special education must aim at advancing the practical abilities that most of the mentally retarded do have, so that they can use them in jobs where greater intellectual abilities are not needed.

We know that in earlier times the male mentally retarded were usually placed in agricultural jobs, the females in housekeeping jobs and the like. Not until the middle of this century we learned that agriculture became too complicated to work with, but the modern industrial work gave the mentally retarded many chances. One of the reasons for the late initiation of the mentally retarded's employment in industries was unemployment, which, in many places, prevented the experiment from being carried through.

Modern industries contain so many single jobs which are easy to manage for the mentally retarded, and which the mentally retarded perhaps are just capable to manage, as the work performance is parallel to their abilities. They become interested and do not find the job monotonous and boring. They usually are diligent and careful in their small jobs; they are often proud to be of use. There are nearly no limits to what working tasks the mentally retarded can do. In certain cases it is a question of organization of the working processes. There is a classical example, where the mentally retarded take part in the production of electronic brains — a process consisting of a series of small, simple operations that are easy to carry out.

The object of rehabilitation should be participation in an activity which is normal in the society in question; this means usually some kind of production. Through production the handicapped will earn money and become more or less independent, and may also in this way become valuable to society. Mentally retarded persons therefore should be encompassed by some general rehabilitation systems. A condition is schooling — usually special education ending up with practical training in the last school years. Special training workshops will often be necessary to attain the optimum target: to place the mentally retarded in the ordinary labor market. For those who are not able to reach this goal, the sheltered workshops will be necessary. Sheltered workshops should be based on productive work, however, with due consideration to the handicapped. Also in these workshops the working methods are identical for mentally retarded and other handicapped persons.

In this connection it may be mentioned that most of the mentally retarded have other handicaps, physical and mental, which means that they are multihandicapped so that it is not always one handicap which has priority. Therefore, it is impossible to sort them out in certain groups, and we know from experience that it is possible to have mentally retarded and non-retarded persons working in the same workshop.

There is no reason to conceal the fact that there are negative attitudes, especially towards the mentally retarded, which have to be broken down. The easiest way to do this is to avoid the segregation of the mentally retarded. Segregation creates prejudices because it hampers good information. In planning general rehabilitation, therefore, the mentally retarded should always be included as potential clientele.

Finally, it should be mentioned that there is a small group of mentally retarded who are so poorly endowed, both physically and psychically, that they cannot participate in an ordinary or a sheltered production. But also this small minority demands our attention. Some can find primitive occupa-

tions, while others, very few, have to live their lives as "care cases." Experience, however, has proved that we have underestimated the possibilities of the mentally retarded. In my country many of them would previously have been placed at a kind of hospital or a nursing home; nowadays they participate in active work, e.g. at sheltered workshops.

An analysis of the workshop activities within the Danish National Service for the Mentally Retarded was carried out in the spring of 1969 on the basis of questionnaires. At the time of examination the Danish National Service for the Mentally Retarded consisted of 57 workshops, 39 of which were non-residential, whereas 18 workshops were run in residential institutions. The workshops are spread over the country which (for the Mental Retardation Service) is divided into 11 regions.

Table 1 shows the distribution of extramural workshops according to size, measured by the number of workers employed. Table 2 shows the average size of workshops and groups.

Table 1
The size of the workshops

No. of workers	extramural	intramural	total
less than 20	0	2	2
20 - 29	9	2	11
30 - 39	12	2	14
40 - 59	10	3	13
60 - 79	4	1	5
80 and over	4	8	12
Total	39	18	57

Table 2
Number of workers in workshops and groups

	extramural	intramural	total
Number of workshops	39	18	57
Number of groups	147	110	257
Number of workers	1788	1559	3347
Average size of groups	12.2	14.2	13.0
Average size of workshops	46	86	59

The inquiry divides the working processes into the following categories:

1. Training for jobs in normal working places at normal or reduced salary;
2. Other forms of training, including observation, rhythmics and song, motor and perceptual training;
3. Sheltered employment, i.e., expectedly permanent employment in the workshops of the National Mental Retardation Service;
4. Less productive employment, i.e., employment of the most severely handicapped;
5. Unspecified employment.

The main results of extramural and intramural workshop-analyses are given in Table 3.

Table 3
The nature of the employment in the workshops

Nature of employment	Number of workers			Percentage		
	extramural	intramural	total	extramural	intramural	total
1	204	81	285	11.4	5.2	8.5
2	33	16	49	1.9	1.0	1.6
3	1292	886	2178	72.3	56.8	65.0
4	246	548	794	13.7	35.2	23.7
5	13	28	41	0.7	1.8	1.2
Total	1788	1559	3347	100.0	100.0	100.0

The personnel dealing with the mentally retarded in the workshops is divided in the following categories:

1. Workshop assistants;
2. Care-trained personnel;
3. Other categories.

A survey of the number of persons employed in these categories in extramural and intramural workshops is given in Table 4.

Table 4
Workshop personnel by categories

Category	Number of employees extramural	intramural	total	Percentage extramural	intramural	total
1 Workshop assistants	115	10	125	63.2	6.2	36.3
2 Care-trained	46	112	158	25.3	69.2	45.9
3 Others	21	40	61	11.5	24.6	17.8
Total	182	162	344	100.0	100.0	100.0
No. of workers	1788	1559	3347			
Employee/worker	9.8	9.6	9.7			

The nature of work carried out in the workshop groups has been categorized in the following types (Table 5):

Table 5
Types of work in the groups

Types	extramural	intramural	total
A. Simple assembly work	36	36	36
B. Complicated assembly work	19	12	16
C. Manual sewing	5	17	10
D. Machine sewing	6	3	5
E. Machines for wood industry	4	5	5
F. Machines for metal industry	10	4	7
G. Other machines	15	6	11
H. Other types	5	17	10
Total	100	100	100

The functions of the personnel in the workshops have been divided into the following groups (Table 6):

Table 6
Percentage time of personnel

Function	extramural	intramural	total
A. Instruction	24.6	41.0	30.6
B. Arrangements of tools	10.1	6.5	8.2
C. Controlling products	30.8	28.7	30.8
D. Counting products	18.9	10.0	15.5
E. Other functions	15.6	13.8	14.9
Total	100.0	100.0	100.0

All group leaders have been asked for their judgment if the ratio between workers and employees in the group is considered reasonable or not. The answers are shown by number of groups and group percentage (Table 7).

Table 7
Worker/employee ratios

	Number of groups extramural	intramural	total	Percentage extramural	intramural	total
Reasonable	86	42	128	59	45	54
Not reasonable	59	50	109	41	54	46
Total	145	92	237	100	100	100

The number of employees needed to give a reasonable ratio cannot be calculated on the basis of these answers.

For the workers discharged from the extramural workshops up to 1968, a survey has been made on the basis of information about where the workers have gone after leaving the workshops.

Table 8
Workers discharged from extramural workshops

	Percent of total
To normal workplace at normal salary	15.1
To normal workplace at reduced salary	12.7
To mental retardation institution	18.2
To other workshops of the service	29.4
Leaving due to age or sickness	6.4
Other reason	18.2
Total discharge	100.0

Many of these workers have obtained employment in industry as unskilled or semi-skilled workers, e.g., shoe manufacturing, machine factories, paper mills, rubber industry or plastic industry. Also some women formerly employed in the sheltered workshops have gone to employment in industry, and some women have been employed as house maids.

Table 9
Age and sex distribution of workers

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
under 18	36	3.9	10	1.5	46	2.9
18 - 20	192	21.0	105	16.0	297	18.9
21 - 24	274	30.0	178	27.1	452	28.7
25 - 29	149	16.3	146	22.2	295	18.8
30 - 39	143	15.6	123	18.7	266	16.9
40 - 49	84	9.2	67	10.2	151	9.6
50 - 59	24	2.6	22	3.3	46	2.9
60 and more	10	1.1	6	0.9	16	1.0
Unspecified	3	0.3	1	0.1	4	0.3
Total	915	100.0	658	100.0	1573	100.0

For both sexes the greatest number of employed is found in the age group from 21 to 24 years.
The housing type of the workers employed in extra-mural workshops in spring of 1968 is (Table 10):

Table 10
Housing type

Housing type	Number	Percent
M. R. institution	108	6.9
M. R. hostel	85	5.4
Other hostel	54	3.4
Family	1147	72.9
Own home	120	7.6
Other	59	3.8
Total	1573	100.0

As an example of segregated arrangements of training severely mentally retarded, our sheltered training workshops are described.

The training workshop is built like an ordinary vocational school with an oriented independent working re-education of the pupils, and with simultaneous comprehensive theoretical education within the actual profession, as well as in general everyday behavior including usage of the society to which one is rising. Visits to enterprises aid in the pupils' choice of profession.

Dewey's vocational school theories are emphasized during the first period of the education. Primarily one is taught to use the tools. At continuation courses each subject is split up so that one is aware of accuracy in case a single part of a subject has to be used within a unity.

The workshop, a three-branched rehabilitation program, runs courses of filing, wood working, and soldering, and each of them consists of a 6-week basic course where hand-tools and drawing are covered. Then a 6-week continuation course introducing electric-hand tools and machinery, and in the soldering section passing to hard-soldering and welding.

The annual program terminates in a 3-week course for every section showing an independent product freely chosen. In the first place the pupils come up with a drawing so that the teacher can estimate the pupil's understanding of the conceptual working process as well as the planning of the project to be carried out by the pupil.

Following the end of the study year, the pupil enters into practical trainee work for 6 months according to his own choice. Then follows a passing to a general profession or even to a profession combined with the continuation of working technical schooling, or he may possibly take advantage of general apprenticeship. The workshop aims at continuing of the short-term working technical education. This is supposed to be a sort of pre-education to educate what is termed a semi-skilled worker.

Besides vocational and theoretical education, constant special education is given for about 160 lessons comprising partly personal relations and hygiene, partly 40 lessons concerning personal relations to Danish social scenery followed by 40 lessons of social-political aspects such as taxes, economy, and budgets.

Within 6 months the capacity of the workshop amounts to 36 pupils applying the 1-year course, and 36 pupils selecting practical trainee work. The working team numbers 6 pupils. There is one skilled artisan for each team. In addition

there are 10 visits to workshops, and finally 21-day excursions annually.

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Vocational Assessment and Training of the Mentally Retarded — A Review of the Program Developed at the B.M. Institute of Mental Health in India

M. R. Kulkarni

Abstract. The paper describes the vocational assessment and training program developed by the Research and Demonstration Project for Rehabilitative Assistance to Mentally Retarded Youth, jointly sponsored by the B.M. Institute and the Rehabilitation Service Administration (RSA) of the United States Department of Health, Education and Welfare. The method of vocational assessment evolved by the project is presented. A detailed description of the four-phase vocational training program based on the Work Personality Development approach is given. Benefits accruing to the clients undergoing the training program are discussed. A brief picture of the mental retardation movement in India is provided as background information.

This paper describes the vocational assessment and training program for severely mentally retarded youths who need development and assessment of psycho-social skills required for different work situations, development and assessment of work skills, work tolerance, work habits and attitudes, and total evaluation of work potential for future employment. Though designed to provide overall development of the mentally retarded in essential life skills, the program is specifically aimed at vocational development leading to employability through the process of work adjustment training. This program was developed as a part of the B.M. Institute-RSA Demonstration Project for Rehabilitation Assistance to Mentally Retarded Youth which was in operation in Ahmedabad from July 3, 1972 to January 2, 1976.

Before presenting the details of the program, it would be appropriate to present background information about the mental retardation movement in India and a general description of the services for the mentally retarded at the B.M. Institute. This information will give an idea of the state of affairs and put into proper perspective the program developed by the project and its usefulness to and utilization by other agencies.

The Mental Retardation Movement in India

The mental retardation movement in India is of very recent origin. In 1941, the first school for the mentally retarded, known as "The School for the Mentally Deficient Children," was established in Bombay. In the next two decades, there was slow progress in the mental retardation movement; only about 25 institutions were established, largely by interested parents and some voluntary organizations. However, the major breakthrough in this regard came in 1963, when the Indian Society for the Rehabilitation of the Handicapped celebrated the first All Indian Day for the Mentally Retarded on December 8, 1963. This was followed by the organization of a number of Seminars/Conferences in Bombay, Ahmedabad, Delhi and other parts of the country. In 1964, the Social Welfare Department of the Government of India took a major step by establishing a "Model School for the Mentally Retarded" at Delhi. Due to increasing interest on the part of the government and because of efforts of some professionals and parents, the first All India Conference on Mental Retardation was held in Delhi in 1965, which resulted in the establishment of the Federation for the Welfare of the Mentally Retarded. Such seminars, conferences, and the efforts of the voluntary organizations for the mentally retarded brought about more awareness of the needs of the mentally retarded. The Social Welfare Department of India and many of the state governments made more funds available through their grants-in-aid to voluntary agencies. The liberal grant-in-aid policy of the government and increased public awareness has resulted in the establishment of more than 100 institutions for the retarded throughout the country. Even though there has been a substantial rise in the number of institutions for the retarded, compared to the needs of the country as a whole it is far from satisfactory. Presently there are no available data which permit a precise statement of the prevalance of mental retardation in India. However, an estimate of 14-16,000,000 can be made on the basis of the generally accepted estimate that approximately 2.5% of the general population consists of the mentally retarded. There are approximately 120 institutions in India, largely developed by voluntary organizations, which provide various ranges of services to nearly 4,000 mentally retarded. It is obvious that there is a need for a great organizational effort in order to provide even minimum services for the retarded in the country.

As far as vocational training programs for the retarded are concerned, these are still in early stages of development. In a survey conducted by the B.M. Institute in 1972, out of

the total of 91 institutions covered, 33 were reported as having some kind of pre-vocational and vocational training programs, largely of the arts and crafts variety. Of these, five institutions were in the process of organizing sheltered workshops for the retarded.

Services for the Mentally Retarded at the B.M. Institute

The B.M. Institute of Mental Health began in 1951 as an institution devoted to the study of child development. It has gradually evolved over the period of 25 years into a comprehensive mental health facility for emotionally disturbed and mentally retarded children and adults, and runs an experimental pre-primary school program for normal children.

The Institute offered token services for the middle-aged mentally retarded as a part of the child guidance clinic of the Institute. From these small beginnings, facilities for the retarded at the Institute have gradually expanded over the years and presently we are in the process of establishing a semi-autonomous center within the Institute. The first of these services to be exclusively established for the mentally retarded was the Clinic for the Mentally Retarded Children. This school was the first to be organized in the city of Ahmedabad. The 'Sharada' school, which started with only three children, mainly as a primary educational program for children ages of 6-16, increased to 30 children by 1967. The services included diagnostic evaluation, training in the three R's and parental counselling. Since most of the children had speech problems, a speech and audiology service was provided in 1967. The occupational therapy program was added in 1970, as increasing need was felt by the Institute for starting vocational training programs for children who had reached adolescence. Soon after the pre-vocational occupational therapy program started, we were fortunate enough to be granted a three and one-half year research demonstration grant by RSA for developing a vocational assessment and training program for mentally retarded adolescents. The project became operational in July of 1972, providing much needed impetus for developing new operations towards a vocational assessment and training program for the retarded and serving as a pilot project to demonstrate the efficacy of vocational training in the rehabilitation of the mentally retarded. The Institution formally established a vocational training program for the mentally retarded based on the experience gained from the project. Currently, the Institute is in the process of developing a sheltered workshop for the mentally retarded under a grant from the Department of Social Welfare, Government of India. It is to be noted that in 1972 the Institute started the first one-year University diploma course in India for training special teachers in the field of mental retardation. The graduate teachers from this program have helped establish more schools in Ahmedabad and other parts of the state with the result that the total number of programs in Gusant State has increased to nine. Also this year, in joint collaboration with the Federation for the Welfare of the Mentally Retarded and the Guyastat University, the B.M. Institute is providing the first one-year all India postgraduate course for scientific study of the developmentally handicapped for teachers, social workers, psychologists, occupational therapists, speech therapists and psychiatrists. The B.M. Institute has pioneered developing services for the mentally retarded in India. Presently the Institute is planning to establish a separate semi-autononous unit known as the "Center for the Developmentally Handicapped." This center will provide diagnostic evaluation, treatment, education and training and vocational rehabilitation services for approximately 150 mentally retarded individuals from birth to adulthood in day programs.

The Institute, which is financed by private charities and government grants, has made provisions for quality care one of its cornerstones in providing services to its clients. Because of this approach, our service programs have remained small in size, client-oriented and are closely monitored. The Institute has been psychodynamically-oriented from its inception and this approach forms the core of all the services provided for the mentally retarded at the Institute. All the programs are serviced through a multi-disciplinary team approach. The Institute has always encouraged experimentation and incorporation of new techniques in the service programs. This process is facilitated through case conferences, seminars and continuous in-service training programs which form a regular part of a working week at the Institute. Involvement of parents in the various educational and service programs is actively promoted through parental counseling, staff-parent meetings and other such programs. As a matter of policy, the Institute provides only the day care program for the mentally retarded, as it is felt that separation of the child from his parents would adversely affect the development of the child. Though normally responsive to the needs of the community because of the above stated policy, the Institute has refrained from starting a residential center for the retarded, in spite of pressure from parents.

The B.M.-RSA Project for Rehabilitative Assistance to Mentally Retarded Youth

As already stated, the B.M.I.-RSA project became operational on July 2, 1972. The project had an evaluation and training staff of nine people, which included a clinical psychologist, a social worker, a special teacher, a senior occupational therapist, a junior occupational therapist, three full-time occupational instructors, and a research officer who was a psychologist by training. In addition to these people, services of the Director of Occupational Therapy and Rehabilitation and the Senior Psychologist were provided to the project on a part-time basis. Other specialist services were made available to the project when necessary. Except for the Senior Occupational Therapist, none of the staff had any experience in working with the mentally retarded; therefore the staff was exposed to a three-month intensive orientation and in-service training program in the area of evaluation, training, and treatment of the mentally retarded. At the end of this training, the staff started working with clients admitted to the project. The criteria for admission to the project was as follows:

1. Only mentally retarded clients between ages 14-21 referred from the Sharada Special School for the Mentally Retarded and the Clinic for the Mentally Retarded will be admitted to the program.
2. Mentally retarded cases of all classification and categories below the IQ level of 75 will be admitted.
3. Clients having problems such as respiratory disease and cardiac disease, etc., will be admitted only after obtaining a fitness certificate from the consulting physician.
4. Only clients who do not have severe physical handicaps which might interfere with the participation in the program are admitted.
5. Clients who are adequately self-sufficient in certain basic personal care needs are admitted.

The first batch of five clients from the Sharada School were admitted to the program in the middle of October and every quarter thereafter a fresh group of five clients were admitted to the program. It was decided by the authorities that the maximum number of clients in training in the program should not exceed 30 at any one time. In all, 37 clients were admitted to the project.

Through a policy decision, the project staff was encouraged to experiment and innovate in the area of evaluation and training of the retarded clients. The evaluation and the training program described in the paper were effectively

used only in the third year of the project. Also, during the first two years, considerable effort was put into training the staff in the evaluation and training techniques.

Approach

The project program was based on the synthesis of the understanding of mental retardation developed at the Institution based on experience gained over the years, and the vocational developmental approach advocated by Dr. William Gellmam and his associates at the Jewish Vocational Service in Chicago. Dr. Gellman, the Director of Jewish Vocational Service in Chicago, was a consultant to our project and influenced our thinking to a great extent.

Over the period of years, we have come to understand mental retardation as a condition in which we come across delay in the overall developmental process. In the process of development, the human organism expects and is expected to achieve specific adaptive behaviors which equip him to cope with life. Meeting societal demands requires adaptive skills and the mastery of self and environment. In the course of his development, an individual is expected to grow and develop along a longitudinal continuum into adulthood. The tasks of adulthood include holding a job, learning to manage a home, developing congenial social relationships, and meeting social obligations. In the process of human development, should the individual experience physical or psychological traumas related to disease, injury, environmental factors or interpersonal relationships, the natural developmental process is interrupted or delayed, leading to deficiency in growth and development of basic life skills and the ability to cope with the environmental demands. The definition of mental retardation given by the American Association on Mental Deficiency in 1961, in *A Manual on Terminology and Classification in Mental Retardation* was used as the operational definition for this project. "Mental Retardation refers to subaverage general intellectual functioning, which originates during the developmental period and is associated with impairment in adaptive behavior." We conceptualize that the mentally retarded individual is affected by the developmental delay in the areas of neuro-physiological, physical, and psycho-social growth which impede his intellectual functioning and impair the development of social language, daily living skills, academic skills and social-cultural skills. In order to habilitate the mentally retarded person into normal community living and his assumption of the adult role, it is essential to facilitate his continued growth in the above-mentioned areas.

We have viewed the (re)habilitation of the mentally retarded as the process of change induced by the modality of the vocational development and adjustment. Gellman and Friedman (1965) state: "The Vocational development program is designed for persons who have never achieved an adequate level of functioning in achievement-demanding situations or who lack a positive orientation and are characterized by paralysis of achievement, e.g., schizophrenic or retarded. It is directed towards the formation of work personality for persons who because of congenital or early disability have deviated from the normal process of vocational development."

The process of vocational development "sets the framework" for future productive life. It has to be initiated quite early in childhood and extended well into adulthood. "The process of learning to work and vocational development leads to the formation of work personality which enables the individual to assume a work role and adjust to work." (Gellman, 1973). The vocational developmental process brings about change in the retarded person as he grows from childhood into adolescence and adulthood. This change is brought about through the family, the social groups, the peers, co-workers, work supervisors and the work environment of the rehabilitation workshop, who function as agents of change. This process of change has to be goal-oriented. While, in the initial phases of (re)habilitation, the goals are directed toward developing psycho-social abilities in the retarded individual, in the later stages the goals are development of adequate work behavior. The rehabilitation workshop uses work as a situational tool to assess and modify work behaviors. The work environment of the workshop provides the psycho-social pressure on the retarded client in terms of participation in work groups, conformity to the role of a worker, an achievement orientation, anticipated production, etc. Workshop counselling, individual counselling, placement in work stations, on-the-job assistance, and follow-up work all help in adjustment and adaptation to a "workday world."

The vocational development process was conceptualized as the movement towards formation and modification of work personality in the mentally retarded individual. Gellman (1973) has defined "work personality" as an integrated, semi-autonomous part of the total personality which functions as a constellation of work behavior, attitudes, and values manifested in typical achievement or work-demanding situations. It is defined operationally as the set of work behavior patterns exhibited in a work situation, or the manner in which the individual enacts the work role. The project conceptualized that the work personality is the product of developmental processes occurring from infancy to old age, the interplay of such forces as culture, social values, nurturing and the acquisition of habits and the effects of man's interaction with the socio-cultural environment. The development of the work personality is considered synonymous with development of employability in the individual. The term "employability" or "work personality" has three components — workability, adjustability, and placeability:

Workability — the possession of background knowledge and skill to perform a task, or number of tasks, singly, in sequence, or simultaneously, within a work setting.

Adjustability — the ability to adjust to changing situations and to new situations within the work setting.

Placeability — the possession of maximum workability, along with work tolerance and social and personal ability useful in obtaining gainful occupation.

The three components of work personality develop in stages over a period of years through vocational developmental processes. They grow parallel to each other until the individual reaches employability in a given work situation. Each stage represents a stage in the development of work personality and ability to adjust to a vocation. The following are the stages of vocational development in the mentally retarded individual:

1. Personal and social adjustment phase-development of adequate skills in personal social functional area;
2. Work skills training phase-development of work skills related to particular tasks;
3. Job adjustment phase — development of job specific skills along with development of work behavior essential for successful vocational adjustment;
4. Employment phase — preparation for employment by developing an adaptable, well-motivated and work-ready person who is capable of performing entry level jobs.

To develop the above-mentioned required abilities in the mentally retarded person requires sensitivity on the part of the teaching staff in understanding the disadvantages that the client has suffered because of his retardation and the ability to understand the client's needs and aspirations. Besides, the individual client belongs to a family which has its own expectations and aspirations for the client. Any pro-

gram for the vocational (re)habilitation of the mentally retarded must be based on thorough evaluation of work personality and training leading to the development of work personality as previously conceptualized. As a result the project staff developed the 5-phased Vocational Evaluation and Training Program.

Five-Phased Vocational Evaluation and Training Program

The emphasis of the program was to first evaluate the needs, abilities and potentialities of the mentally retarded client, so that on the basis of this evaluation the client can be put through phase-wise, dynamically oriented, sequential work adjustment training programs. The client functioning below a given level was provided extensive service programs, so that following training he could move up to the next level of the training program. Thus initial evaluation, training, re-evaluation pattern was put into use at all phases of training program. Details of the evaluation and training program follow:

Phase I: Initial Evaluation Phase

A detailed evaluation program was worked out as part of the project to assess the needs of the client and his family at the time of his admission in addition to the work evaluation. The primary areas for evaluation were:

1. Initial evaluation to identify the level of the function of the client along with other relevant factors such as (re)habilitation goals, family expectations, periodical evaluation, etc.

2. To provide interim assessment of the client's performance as he moves from one phase of training to the next phase of training. This interim evaluation helped in locating areas in which client had not progressed sufficiently and indicated the direction of training or treatment to be provided.

3. The terminal evaluation to determine the final level of functioning when the client left the training program. The terminal evaluation helped in identifying the attainments of the client during his training.

The evaluative program at the initial evaluation phase usually required a period of six to seven weeks, out of which the first three weeks were spent in individual detailed evaluation by the psychiatrist, psychiatric social worker, the clinical psychologist, the educational specialist and the occupational therapist, before he was exposed to a three-week detailed work evaluation program within the workshop situation. The psychiatric social worker prepared a detailed case study by interviewing the parents and the client, and through home visits, so that sufficient information and the psycho-social background of the client were available for the use of all clinical staff. The psychological testing primarily assessed the cognitive abilities and the emotional development of the client. The special teacher evaluated the reading, writing and arithmetic abilities of the client and the client's capacity to learn through a formal teaching program. The occupational therapist provided information on perceptual motor functions, neuromuscular co-ordination, and evaluation of any other functional disabilities associated with primary diagnosis. He also evaluated the problem areas in the Activities of Daily Living.

The work evaluation was conducted by the occupational therapist, along with the help of workshop instructors and other clinical staff. This involved three weeks of intensive observation of the client within the workshop in realistic work situations. This helped in preparing the profile of client's work performance. It also provided us with dynamic analytical information regarding client's vocational potential, his capacity for change, and his potential for emotional and social adjustment to the demands of work. The work sample testing was done to evaluate work abilities of the client. The following evaluation tools were used:

1. A modified version of the *Adaptive Behavior Scale*, developed originally by the American Association on Mental Deficiency;

2. Workshop observation scale, which was modified from Goodwill Industries' "Supervisors Observation Guide" *(Employability Scale);*

3. Seven work-sample tests developed by the project staff.

These tools provided information on personal and social adaptation and the present level of function of the client along with identification of maladaptive behaviors. This information then helped us in organizing a program which was specifically aimed at overcoming the problems revealed by the evaluation process. This evaluation answered the following basic questions:

1. What type of background does the client come from, and what are his personal assets and liabilities in terms of social, emotional and economic functioning?

2. What are the factors that are affecting the client's future development?

3. What type and level of training program is to be provided to the client and does he need other therapeutic intervention?

4. What predictions can be made about the rehabilitation outcome of the client?

The following is the detailed analysis of the attributes of the clients admitted at the B.M.I.-RSA project at the initial evaluation Phase (total 37):

1. All except one were below an IQ level of 50. The highest level of IQ was 59 and lowest level of IQ was 19. The majority fell in the IQ 35-50 category.

2. All had problems in communication. Most of the clients had speech problems. In 30% of the clients, poor development of language was hindering the verbal communication process.

2. All clients had difficulty in social relationships.

4. All clients had motor problems.

5. Sixty percent of the clients had perceptual motor problems.

6. All clients showed poor self-esteem.

7. Forty percent of the clients had never been to school.

8. All the clients had problems in adjustment at home.

9. In all cases, either parents or siblings accompanied the client when he went out; he was never allowed to go out alone.

10. Except for clients from Sharada Special School, none had friends.

11. Almost all of them were reported as sulking, crying or having temper tantrums when they could not have their own way.

12. About 75% of the clients could not participate meaningfully in the social life of the program.

13. All the trainees perceived staff as parents or teachers and tended to act child-like.

14. All parents had guilt feelings about having a mentally retarded child.

15. Only 30% of clients had prevocational experience and only one client had any work experience.

16. All clients were toilet-trained and were able to locomote without assistance.

17. Among the clients, 18.8% belonged to the upper income group (annual income: above Rs $18,000), 59.6% belonged to the middle income group (annual income: between Rs $6,000 and $18,000), and 21.6% belonged to the lower income group (annual income: below Rs $6,000).

Phase II: Personal and Social Adjustment Phase

Though work activity is the primary means through which the retarded person is to be adjusted to work, since many of the clients had little or sometimes even no experience of situations outside the home and had poor psycho-social skills, it was essential to put them through a program for the development of psycho-social skills. Besides, nearly 70% of the clients had no work experience; it was essential to provide them with a non-threatening supportive environment which helped them to deal with the demands of new situations such as the workshop. The utilization of non-threatening work experience and the interpersonal relationship to satisfy the clients' personal needs, and to develop adequate adjustment proved to be an absorbing developmental process. Judicious use of supportive attitudes, discipline, and environmental structure based on therapeutically indicated flexibility provided the means for adaptation and adjustment to the work situation. The programs in the personal-social adjustment phase were introduced at the existing level of functioning of the client and were linked up with his earlier life experiences. Since most of the clients lacked skills in the area of Activities of Daily Living, personal-social hygiene, utilization of public transport, and verbal communication, special programs were set up in these areas. Because all of them required training in reading, writing and simple arithmetic work, a special education program was organized to develop a work-oriented classroom program, which attempted to train the clients in the areas of time-telling, weights and measures, and recognition of street signs, workshop tools, etc. Recreational activities were organized in the lunch recess to help in socialization and learning of the use of leisure time. Many of the maladaptive behaviors were handled through use of behavior modification strategies, environmental manipulation, workshop counselling and individual counselling. The peer group pressures and fear of rejection from the colleagues were an important influence in extinction of maladaptive behavior. All these approaches were organized within a work-oriented program in the workshop situation. Clients were introduced to simple tasks first, which later increased in complexity. Work experiences were provided in the area of maintenance tasks, simple workshop practice, simple food preparation and handling, and kitchen gardening. Basic operations like cleaning, dusting, and mopping were emphasized from the beginning.

Since the family plays a major role in (re)habilitation of a retarded person, parental counselling was provided to all the parents in addition to providing information about the etiology of mental retardation in general terms. Parents were encouraged to discuss their problems related to the handling of the clients at home. Both individual and group counselling methods were used.

It was observed that the clients became well-adjusted to the program within a period ranging from 3-6 months. When they reached this phase, they were observed to be well-adjusted to the workshop routine, and the training program had become a part of their living system. They showed no specific interest in learning new tasks and were able to sustain themselves for longer periods in the work situation.

Phase III: Work Skills Training Phase

The ability to work in different work situations is an important component of vocational development aimed at the development of maximum employability. Since the majority of our clients had limited work skills, we developed a work skills training program which provided for a wide spectrum of work experience. The work orientation program initiated in the second phase was extended to provide specific work experience in tasks such as woodwork, metal work, weaving, book binding, box mailing, printing, tailoring, needlework, laundrying, maintenance work, gardening, kitchen craft, etc. The clients were rotated from one task to another in order to provide them with a wide variety of experience. The program emphasized development of neuromuscular skills, work tolerance, improvement in speed, quality and consistency in performance. The workshop environment was used to teach the retarded client to deal with the demands of a work-a-day world. The supervisors used interpersonal relationships, the work pressure and the demands of production to change the behavior of the client and for development of good work habits, as well as positive attitudes towards supervisors and co-workers. In the later stages of the work-skills training programs, the clients were placed on a part-time basis in the work situations like the canteen (cafeteria), the administrative offices, the library, the Day Care Unit and the telephone switchboard, providing reality-based work experience for the mentally retarded client. They learned the rules of the work place, and the social behavior appropriate to the work situation. The female clients were provided with intensive training in activities related to homemaker training, such as simple cooking, purchasing of groceries, stitching and mending of clothes. The special educationist worked in close cooperation with other workshop staff to relate classroom education to the training in the workshop. This was the core of the vocational-oriented educational program.

By this time the staff had begun to clearly understand the needs of the individual clients and also had been able to pinpoint various maladaptive behaviors which were hindering the progress of individual clients. Besides workshop counselling and group counselling, individual counselling was provided to those clients who needed such an approach. The work with the family at this stage was aimed at the values and the behavior patterns conducive to the work training of the retarded clients.

Phase IV: The Job Adjustment Phase

When the clients had achieved sufficient degrees of work skills, demonstrated good work habits and positive attitudes towards work, and interacted appropriately with co-workers and supervisors, they were put into a job-specific training phase. Each area of work was assigned as a work station and the client was put on full-time work in each work station. By the time the client reached job adjustment phase, he usually showed interest in the particular job area and he was assigned for intensive training in that job area. Due consideration was given to the cultural values of the family in deciding the areas in which the client was to be trained. For girls, the program emphasized training in operations related to kitchen and maintenance work at home with the intention of improving placeability of the client. Emphasis was given on punctuality in work, obedience, personal habits, social manners, appropriate communication, etc. In the later stages of job adjustment phase, clients were put on part-time work experience in work stations outside the Institute to provide them with real work experience. The other half of the day was utilized in providing additional training and guidance within the rehabilitation workshop, aimed at overcoming the shortcomings which the client had shown while working at the work stations outside. Such transitional work placements helped in making the client "work ready."

The vocational counselling of the client at this stage proved to be very important in preparing him for employment in the community. Individual counselling was provided to all the clients to deal with their problems and anxieties related to taking up a job outside. Families had to be prepared for accepting the retarded client as a worker who

has his own place within the family system. Often, siblings had to be counselled, as they had not accepted the changed role of the client. In a few cases, intensive work with the family had to be initiated by the social worker.

Phase V: Employment Phase

The real test of growth of employability in a retarded client is his placement in community employment. Since it was not easy to get open employment in industry, we made efforts to secure employment for our clients through friends and relatives of the client's family. The help of the National Society for Equal Opportunities for the Handicapped (Gujarat Chapter) was utilized in locating jobs and securing jobs in industry. We also made attempts to place clients in self-employment with support from family.

In spite of our efforts, jobs were difficult to come by. Therefore, we decided to organize a sheltered workshop on a limited basis. Sub-contracts were secured for office file-making and lock assembly from local firms. Production-oriented work was started in woodwork and metal work sections and orders were solicited. The clients are paid wages on a piece-work basis. Currently, the plans are under way to organize a regular sheltered workshop within the premises of the Institute.

Those clients who are placed in community employment are being provided with follow-up services to deal with any problems which may arise consequent to their placement.

A Brief Summary of the Outcome of the Project

Seventy-four clients were called for admission to the programs, 44 turned up for registration, and six dropped out during evaluation. In addition, 37 clients were admitted to training, three dropped out during training due to domestic reasons, four clients were transferred to Shanada Special School as they were considered unsuitable for the program, and one client died while in training. Twenty-nine clients completed the training or were in different phases of training. By the end of the project, on January 7, 1976, 12 clients had been placed in employment, five were placed in sheltered employment, and the 12 were still in training. By August 1976, 14 clients had been placed in employment, eight were in sheltered employment and seven were in work-skills and job adjustment training phase. (Those interested can obtain detailed analysis of data from the author).

The project proved to be a useful demonstration to those working in the field of mental retardation. The project staff presented the vocational developmental model in the "All India Seminar on Developmental Approach in Occupational Therapy" in December of 1976, and at the "Second All India Refresher Course for Workers in Mental Retardation" held in February of 1976 at the B.M. Institute.

In summary, a mentally retarded adolescent is deprived or disadvantaged from early childhood. Disadvantages result in parental neglect, lack of opportunity, low self-esteem, depression, aggression, and many other maladaptive behavioral problems. The lack of opportunity to have normal psycho-social adjustment from early childhood hampers development and when he reaches adolescence, the retarded person is far behind other normal adolescents in social and economic competence. His ability to cope with environmental demands is poor, and he is unable to adapt to varying environments. Left by himself, he is not able to cope with the demands of the adult work-a-day world. For the adolescent retarded person, (re)habilitation is a developmental process, which provides the necessary input of experiences to halt and, if possible, reverse the process of disadvantagement. The experiences provided in the *milieu* of a rehabilitation workshop bring about vocational development in the mentally retarded as he grows from adolescence into adulthood. The three components of employability are: workability, adjustability, and placeability. Developed simultaneously in the retarded person, they lead to a growth of employability. This growth takes place by exposure of the retarded person to a work environment of the (re)habilitation workshop, wherein the workshop supervisors, the co-workers, the social group and the family are used to bring about the desired change. The agents of change work towards development of adequate psycho-social ability and work behavior in the retarded. As the retarded person develops in his workability due to exposure to the work training program, his placement in different work stations and counselling improve his ability to adjust to different work situations. The training in interpersonal abilities improves his ability to meet the demands of community employment. The work with the family is of great importance for the success of the program. The outcome of the project has proven that if the mentally retarded is provided with orderly sequential vocational preparation from early adolescence, this will lead to an orderly outcome of gainful employment in the community by the time he reaches adulthood.

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Sheltered Workshops as a Method of Approach to The Normalization Principle

Peter Lennig

Abstract. Sheltered workshops are defined, and the basic requirements to be met in sheltered workshops are listed. The conditions of work, the makeup of the group, special methods, types and variations on the theme of sheltered workshops, workshop operation, and staff are described on a theoretical basis founded on a vocational creed.

Definition of Sheltered Workshops

"Sheltered employment is to be understood as productive, remunerative employment of any type, supplied under conditions especially designed to meet the temporary or permanent employment needs of handicapped people." This basic definition is embodied in Recommendation No. 99, Section 8 of the International Labor Organization, and further endorsed at the following conventions: the International Seminar on Sheltered Employment held at Saltsjobaden, Sweden, in 1964 and again in Frankfurt (Main), Germany, in 1966; the European Symposium held at Luxembourg in 1971; and the American Association on Mental Deficiency Research Seminar in the United States in 1971.

In further amplification of this basic statement or definition, we believe that the following principles should be integrated as part of a basic fundamental approach to organizing sheltered workshops:

1. The right to participate in the life of the community — maximum social integration.
2. The right to work, even for those who are severely disabled.
3. Combination of temporary and permanent employment.
4. Combination of training and production under the same roof.
5. With certain specific limitations, adoption of a basic policy designed to fully integrate various types of handicapped and disabled persons within the workshop program.

In order to effectively realize the benefits to be accrued from adoption of these principles, the following must be incorporated in establishing a viable workshop program.

Basic Requirements to be Met in Workshops for the Disabled

1. Adaptation of the work in accordance with the needs of the disabled, rather than the other way around.
2. Recognition of the fact that educational and production methods must be adapted to the needs of the disabled.
3. The training program, and its goals, should not be artificially conceived. Every attempt should be made to provide genuine productive work, not a time-consuming substitute.
4. The various phases of the production effort must be broken down into readily distinguishable components, adapted to the understanding of the disabled.
5. As large a variety of skills as possible should be offered in the workshops, to enable special consideration to be given in respect to individual inclination or preference (special industries, special grades of difficulty, etc.).
6. The training program should enable those disabled persons who display better than average efficiency to eventually pass into the general labor market. This would indicate a need to provide intensive working methods, behavioral training, and special emphasis on maintaining a high standard of efficiency.
7. The workshop should have a sound financial basis and a clearly defined and readily understandable organizational structure.
8. A rounded program, designed to incorporate special services with respect to organizing leisure time, stressing of the family sphere, and special attention to personal care, is essential if the goal is to be achieved.

Basic Workshop Conditions

Workshops should be organized to provide maximum capability of offering the retarded the training and work possibilities suitable to their individual abilities and inclinations, in addition to providing for the specific nature or severity of the disability. Practical personal experience, supported by the results of a survey, clearly indicate a considerable advantage in larger units. A large unit enjoys a broader financial basis, thereby permitting the hiring of staff members with qualifications beyond those of a supervisor, such as social workers, medical specialists, psychologists, speech therapists, etc. In addition to the financial base, the establishment of a large unit obviously is dependent upon the economic facts of life which pertain to the immediate locale, its accessibility to potential customer firms, and considerations of public transportation facilities.

Other essential conditions relate to specific requirements such as a suitable architectural and constructional layout, the technical equipment of the workshop, tooling, aids, and well-designed production-flow facilities in addition to all types of machinery to offer the retarded optimum opportunity and possibilities.

The sponsoring organization should be in a position to ensure a sound financial base. A self-supporting workshop would appear to be rather unrealistic. The early days of charity are over; workshops require proper funding. In other words, government funding (municipal, etc.) is needed, as well as favorable tax considerations.

The overriding factor, however, must be that the workshop is planned and organized for the needs of the retarded, and not for the needs of the staff.

It is essential that a workshop have a modern organizational structure, endowed with the flexibility of an industrial firm and devoid of the rigidity generally associated with bureaucratic public institutions. The organization must be open to new, occasionally progressive, philosophies.

The Group of Persons in the Workshop

Contemporary understanding of the complex, interdependent factors associated with the treatment of the disabled within sheltered workshops would appear to render obsolete the so-called classical system of categorizing the disabled as physically, mentally or psychologically disabled. These generalizations tell us little. If a system of classification is deemed desirable with respect to the group of persons involved in a sheltered workshop, it might be better to devise a system of classification based on the facts surrounding these disabilities and the efforts expended by the sheltered workshop. In this context we are faced with persons who, because of their retardation, are unable to work within the general labor market. We are also faced with persons whose retardation renders them, for the time being at least, unable to be integrated into the general labor market. Then again, we have those persons

who, because of their particular disabilities, cannot be readjusted in normal re-education centers, adult training centers or conventional vocational rehabilitation centers. The realities of running a sheltered workshop would seem to dictate the need for devising a new system of classifying the disabled, based on these criteria.

Persons with multiple disabilities should be grouped together within the workshop in homogeneous working teams, except where not feasible on the basis of medical, educational, or psychological indications.

The question is often raised as to which retarded individuals are capable of productive and meaningful work. In this context, the following proposals are offered:

1. A retarded person who is capable of basic self-care is almost certainly capable of participating in sheltered work. In other words, I.Q. or other test results for such persons do not disqualify them for participation in sheltered work.

2. A retarded person who can evidence some form of satisfaction from arts and crafts activities, or who is capable of purposeful play is quite likely, by the same token, to be capable of participation in sheltered work.

3. Inability to walk, lack of speech or language capability, and even incontinence, are not necessarily indicators that a retarded person is incapable of participation in sheltered work.

We must bear in mind that a sheltered workshop does have definite limitations. But we do realize today, based on practical experience, that we are able to handle and train various types of retarded persons, who, as recently as 10 years ago, were classified as untrainable. We must be especially cautious today with respect to issuing prejudicial statements such as "impossible" or "untrainable."

Our experience indicates that retarded individuals can be integrated relatively smoothly with respect to actual work, whereas the experience with respect to the integration in social and leisure activities appears to be less satisfactory.

According to our statistics and estimates, approximately 80% live with their families, 15% in hostels or halfway houses, and 5% in closed institutions. They come to the workshops daily, some utilizing public transportation facilities independently, whereas others require some form of organized transportation such as private buses, etc.

The Vocational Creed

Wolfensberger, in *"Mental Retardation"* proposes reformulation of the often quoted motto of the Vineland Training School "Happiness first — all else will follow" into "A full day of work — happiness usually will follow." We concur wholeheartedly with his view. As the result of our experience in daily contact with the retarded, we find that:

1. A working retarded person is generally a happier person. Work provides self-esteem and a feeling of personal accomplishment.

2. Productive work imparts an adult status to the retarded individual, thus adding to his dignity in the sight of others.

3. In our work-oriented society, the worker is generally afforded a positive attitude, whereas the drone is the subject of a negative attitude.

4. The family of the working retarded person is generally a better adjusted family, with the result that his family environment can be regarded as an asset.

5. A retarded person who is capable of working is less likely to become an absolute economic burden to his family or to the society in which he lives.

6. A working retarded person actually becomes a contributing factor to the economic welfare of the society, when his efforts are properly channeled.

7. Idleness for the retarded person can result in absolute failure to adapt, and even non-adaptive behavior patterns.

The Workshop — Examples of Production

The question is raised as to what type of projects are feasible and/or suitable for the program of a sheltered workshop. Without digressing into detailed descriptions at this point, it is our belief that within our highly technical industrial society with its division of labor, the sheltered workshop enjoys a uniquely favorable position. Practical experience indicates that suitable work of any degree of difficulty, in every sector of industry and production, can be performed by the retarded (with the exception possibly of very dangerous or heavy work) when suitable job preparation and analysis is undertaken. Three basic possibilities are suggested:

1. Industrial subcontracting
2. Services
3. Autonomous production, with marketing.

The positive and progressive attitude with respect to rehabilitation in general, and especially in the field of sheltered workshops, must be the basis of such activities. Unfortunately, we encounter again and again outmoded concepts and philosophies reminiscent of medieval-type thinking in relation to the ancient crafts and guilds. Unfortunately, there are some who believe, as an example, that female retarded persons can only work in the home economics department. Such views are shared by various authors who regard the progress of automation as some sort of nightmare spectre looming over the workshops and the rehabilitation of the retarded. Rather than entertain such a negative view, I would suggest that it is incumbent upon those responsible for the management of sheltered workshops to learn to adapt to the society in which we live. We must learn to adapt first if it is our intent to assist the retarded in adapting to the extent of their capabilities.

Special Methods

A fundamental principle with respect to training the retarded is that progress must be accomplished in short, methodical steps. No attempt must be made to compress or accelerate the time requirements so essential to achievement of the desired results. We propose the following stages:

1. Orientation, observation and assessment
2. Settling-in, or adapting to the surroundings
3. General training
4. Detailed, practical training
5. Actual work itself.

Workshop Types and Variations

Workshops can be classified as follows:

1. The habilitation or rehabilitation workshop for the preparation or the repreparation of trainees for employment on the open market;

2. The terminal workshop, for those who can be engaged in productive work under protective conditions;

3. The occupational workshop, a sort of day-care centre for adult retarded persons.

Variations:

1. Workshops in industry (temporary and permanent)
2. Workshops without walls (temporary job service)
3. Workshops at home (individual work at home).

We must seriously examine the advisability of isolating these three particular types of workshops, possibly attempting to integrate them under one roof. This could conceivably eliminate the problem we are often faced with in respect to handicapped or disabled persons unable to fit into one or the other specific type of workshop and who have been previously labeled as untrainable. Integration of the three basic types of workshops could result in a situation, or environment, in which they could be viably integrated.

Workshops also have a tendency to vary, as a result of the possible influence of the sponsoring organization. These

organizations are as diverse as society itself: parents' associations, local welfare and good-will associations, religious and church organizations, private industry or foundations, labor and trade union oriented associations, and local, state or municipal agencies.

Without the sponsoring organizations, many workshops' existence today would not have been possible. However, the diversity of the sponsoring organizations, coupled with the professionalism of their approach to the question of organization of workshops, undoubtedly influences the quality and professionalism exhibited by many workshops. Unfortunately, it occasionally seems as though retarded persons exist for the sole purpose of enabling the sponsoring organization to glorify its magnanimity and efforts in this area, or perhaps even serve the purpose of glorifying the board of directors of the organization or an individual member. While this may be a fact of life, hopefully the quality of the professionalism associated with the management in the direction of such workshops will not suffer.

Rotation and Operation

One very important aspect of the operation of a workshop is the development of a universal capability on the part of the retarded in order to further the possibility of his eventual transfer into the open labor market. It has been shown that where a retarded individual is able to effect many operations — and this is possible — he is less likely to become overspecialized. Even the severely mentally retarded have been known to develop the capability of transferring from one operation to another, but an essential prerequisite is providing him with the chance to develop such capability.

An analysis of the general operations in our sheltered workshops resulted in the establishment of the following categories:

1. Assembly — putting things, parts, materials together.
2. Machine operation — push button operation of modern machinery, coupled with the repetitive handling of materials.
3. Processing — involving the handling of specific materials, and simple manual operations such as cutting, riveting, soldering, welding, gluing, painting, etc. This can involve various materials such as metal, wood, paper, plastics and paint.
4. Office operations — including deliveries, mailing operations and other services of a similar nature.
5. Landscaping operations — involving normal outdoor landscaping and gardening as well as farming operations.
6. Maintenance — including a variety of services such as cleaning, janitorial work and various other service functions.
7. Home economics — involving all types of household-type functions and activities.

Staff

The success of a general rehabilitation program is wholly dependent upon the training afforded a retarded person within a workshop and the appropriate professional specializations of the staff. Obviously, a high degree of cooperation and coordination, as well as collaboration, is necessary among the members of the staff. The staff, in this sense, may be considered an "advisory team" in the sense that it involves not only the immediate workshop staff but also the medical specialist, psychologist, the social worker, the follow-up counselor and various members of the agencies involved within the community itself.

Conclusion

A sheltered workshop must be integrated within, and become an integral part of, the community. The cooperation of all agencies concerned with rehabilitation efforts, including the family of the retarded person, the retarded person himself, and the various public relation activities in the community. This is essential, as a successful rehabilitation program cannot exist as an isolated function.

In summarizing the basic problems extant, the following appear to be the most obvious:

1. Insufficient living quarters for the adolescent retarded.
2. Inadequate opportunities for providing suitable work for the retarded in rural areas, due to the absence of previously noted community prerequisites.
3. Transportation problems peculiar to the disabled, as well as architectural barriers resulting from failure to consider the specific needs and requirements of the disabled and handicapped in planning structures.
4. Failure to understand that mixed groups of the retarded or handicapped experience similar adaptation problems similar to those found among the non-handicapped.

Amplifying these problems, we may refer to Tizzard and O'Connor (1952), Gunzberg (1958), who listed the following specific failings and criticisms of traditional methods used in the training of the retarded individual:

1. Training which is more likely to promote occupation, rather than employment.
2. Too little relationship between the work done in the training situation and that which may be expected on jobs likely to be obtained in the community.
3. Too little or obsolete machinery in workshops, with not enough emphasis on the maintenance of a standard, or tempo of production.
4. Not enough contact with commercial firms.
5. Not enough utilization or development of incentive schemes.
6. Too little supervision with respect to eventual job placement.
7. Too little emphasis on selection and training of supervisors.

In conclusion, I find the following four questions of paramount importance:

1. Should the disabled person be required to adapt himself to the job and the training possibilities offered, or should the jobs and the training be adapted to his particular needs?
2. Shall we stress the importance of the retarded person attaining a measurable economic success or is it our function to stress his social integration?
3. Can we equate the sense of achievement attained by the disabled with the same values as viewed by those who are not disabled?
4. Should a workshop for the disabled and handicapped be nothing but a place to work, or should it be designed to provide not only for development of job skills but furthering a social, leisure and personal attainment level?

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AAMD Seminar, Washington, D.C., 1971; European Symposium, Luxemburg, 1971; 5th International Congress, Montreal, 1972; International Symposium, Tel Aviv, 1973; and Convention of the California Association for the Retarded, Los Angeles, 1974.

A Comprehensive State Plan to Provide Deinstitutionalization Via Sheltered Workshops and Occupational Day Centers

Pamela Guffey Samuels

Abstract. The development of a program for deinstitutionalization, known as the Department of General Services, is described. Funding and planning phases are complete.

Objectives include the provision of personnel for this dispersal program, use of community resources, effecting understanding and support from citizenry, and integration with other community facilities and programs. Guidelines are set up to provide a work-related and job-oriented program so that four levels of habilitation after evaluation are available:

1. Direct placement into a job or non-job training
2. Placement in an evaluation program
3. Sheltered employment
4. Placement in an occupational day care center

With the evergrowing emphasis in the field of mental retardation and developmental disabilities on normalization, the Commonwealth of Pennsylvania, Department of Public Welfare, was faced with the task of responding to public pressure to improve the institutions and develop a program for the implementation of deinstitutionalization.

In response to the public and professional urging, we developed a plan in the Southeastern Region of Pennsylvania to disperse some 50% of the residents of our local State School and Hospital. This project is referred to as Department of General Services 523-1. Pennhurst State School was selected as the pilot institution due to an indepth investigation that was carried out in the 1960's and resulted in the passage of Senate Bill No. 1304 which was introduced on March 3, 1970, to transfer $16,419,000 from Pennhurst to this project.

Project DGS 523-1 was funded in November, 1970, when the Commonwealth of Pennsylvania enacted Legislative Act No. 256 which made this project possible. The intent of the project was:

> for the planning, design and construction of mental retardation service units; and acquisition of property, total population survey and social system analysis as required to provide definitive treatment and normalizing accommodations for mentally retarded residents of Bucks, Chester, Delaware, Montgomery and Philadelphia counties and to be located in the same counties. The units were to provide accommodations for approximately 900 patients to reduce the population at Pennhurst State School and Hospital to a maximum of 1,000. This capital investment was to provide a logical dispersal and reorientation into the community for Pennhurst residents and alternatives to institutionalization for the Pennhurst waiting list population and other mentally retarded citizens of the area who required or would require such treatment and accommodations. This program was to be completed as expeditiously as possible so that the first units may be occupied not later than two years from the effective date of this act. The total budget for Base Construction, Acquisition, Survey and Analysis was $16,863,000.

The next step was to carry out a planning phase to determine the type, size and location of facilities to provide definitive treatment and normalizing accommodations for the residents of Pennhurst State School and Hospital. These facilities were to be located in or near the clients' home communities. This program was a step forward in applying the "normalization principle" for all of Pennsylvania's present and future mentally retarded citizens. This meant that residential and non-residential facilities, programs and services would be provided to the mentally retarded in their own communities.

The "normalization principle" for programs to serve mentally retarded was first advocated and demonstrated in the Scandinavian countries. As expressed by Mr. Benjt Nirje of Sweden, the "normalization principle" means "making available to the mentally retarded patterns and conditions of everyday life which are as close as possible to the norms and patterns of the mainstream of society." Dr. Wolf Wolfensberger of Nebraska was seen as our nation's leader as an advocate and helped to develop an excellent state and local model program in Nebraska which demonstrated this approach. Dr. Wolfensberger was a consultant to the Region I Planning Project; representatives from Pennsylvania visited and studied the Nebraska program.

The President's Committee on Mental Retardation, the National Association for Retarded Citizens, the Pennsylvania Association for Retarded Citizens and the Office of Mental Retardation of the Pennsylvania Department of Public Welfare adopted the "normalization principle" as the guiding principle for programs which serve the mentally retarded.

Simply stated, this means the needs of the mentally retarded should be met in his own neighborhood and community. Facilities should be physically and socially integrated into the community, not developed as an isolated appendage of society. The number of retarded placed in a neighborhood or community should not be more than can be absorbed and integrated successfully within that community. These persons should not be labeled and stigmatized but should be viewed as adults who have individual human development needs.

Another objective was to integrate this dispersal program with other community facilities and programs being developed for the mentally retarded in the Commonwealth. The facilities, manpower and services developed by this specific project were to add to the array of appropriate facilities, programs and services needed by all retarded and their families.

A critical need and one of the most important objectives was the provision of adequate and qualified manpower to successfully develop and implement the Pennhurst dispersal project. A well-coordinated comprehensive community program was seen as essential if this project was to be successfully implemented. Qualified manpower was needed at all levels (state, regional, county, local community and Pennhurst), but must be provided and coordinated by the county and local service delivery system. Manpower was required to evaluate individual and group needs for placement and programming; manpower for the social service function which included counselling and guidance for the retarded, his family and staff who work in program areas; manpower to develop and implement the variety of community-based residential living units needed and staff programs for activities for adults, special vocational services centers, use of generic and specialized programs in education, recreation, religion, etc. Use of volunteer services and community resources were other important program components seen as being needed to be developed, utilized and integrated. The key to the effective implementation was the Pennsylvania system of a County MH/MR Program administrative structure and process whereby planning, directing and coordination of the delivery of program components to meet the needs of mentally retarded persons and their families, would be available. It was seen that this county involvement would guarantee that decision making would not be dispersed nor diffused, but available to use for the best interests of the retarded and to provide for the most flexible use of material and human resources. One recommendation was to develop a model, a coordinated, comprehensive 5-county Regional MH/MR Community Program similar to that operating in Lincoln and Omaha, Nebraska, and use this model program for demonstration, consultation, training and research.

Another objective of this project was to effect better understanding and support of the citizenry for this and other community-operated programs. It has been said the mark of a culture can be determined by how much it invests in its less fortunate. Invest is an appropriate term for this and similar programs. The civil and human rights of those we label mentally retarded should be championed by our free society. The community-based approach creates more taxmakers and citizens rather than tax-takers and alienated dependents. These facilities and programs would provide more jobs within the neighborhoods and communities. Duplication of facilities and services would be avoided. For example, instead of building a school building at an isolated institution, the children and youth would attend school programs in their neighborhoods and communities like other students. Another important benefit would be to move more solidly toward prevention and intervention programs at the home, neighborhood and community level. Most of our efforts in this field over the past century have been more costly reaction-type programs of a custodial nature.

Following the planning phase, it became the responsibility of the Southeastern Regional Office to implement the project. In January 1973, all five counties involved were asked to supply their needs and priorities for programs. These were reviewed and the plans approved. Then each county began to submit to the Department potential sites for the various programs. Upon completion of the acquisition phase, the remaining funds were allocated for construction based on estimates of the projected construction costs at the anticipated bid date. An inflationary figure was added for each site to allow for an unexpected delay beyond our projected bid date. It should also be known that DGS will not accept a final design submission from the architect unless there is a percentage included to cover escalation.

All the design work was to be conducted by private architectural firms that were hired under contracts to carry out a total county project. Thus the Department of Public Welfare was working with five separate firms to provide the 26 sites that were deemed necessary. As of this date, all 26 sites are in varying stages of design development. Three are nearing formal bid dates with nine programs in Philadelphia just starting the schematic phase. It is projected that all 26 programs will be operational by the end of fiscal year 1979.

We are now at the stage of having several programs operational on a program-funded status, with several others anticipated to be ready in the near future. The program guidelines are as follows:

The fundamental responsibility of the program should be to provide a work-related and job-oriented program for mentally retarded persons residing in the local catchment area (service delivery system) who are over 21 years of age, and would be considered moderately, severely and profoundly mentally handicapped. Although there is little doubt that we have neither motivated nor trained this population to the highest levels of function which they can obtain, the question of who should be trained and what movement of the population should be are certainly issues which need to be considered. Our historical approach to services for the retarded has been within the framework of social service orientation with little or no real work related or work responsible program service delivery. There must be a system of delivery within the framework of a continuity of program opportunity for mentally retarded in the local catchment area, with one agency not attempting to provide all services, as this will do nothing but proliferate the variety of professional personnel and skyrocketing costs required to meet the needs of that population, since there are already delivery systems in place in the communities which are by law responsible for providing varied services. The fact that they have not been functioning adequately at this point in time is no justification for continuing to reinforce this problem.

As a total system, the agency, county, region, and State must create a model of coordinated cooperative efforts to meet the needs of the handicapped persons; we must clearly define the program services each of us is required to deliver. Each of our existing and developing service systems cannot, and must not be all things to all people. In the clinical delivery of services, we must recognize that each of us has a particular role in developing the level of capability of mentally retarded persons, but that the mentally retarded individual must be prepared to move on to other program services in other resources at particular points in time of their ability development. With this DGS project of workshop/occupational day centers, as a system delivering these services, our goal is to improve the level of function of the individual to a degree which will make him/her capable of mobility into another training resource system. The ability to move geographically and physically into and through that system as well is one of their major training needs. The theory that all services should be available to an individual living in a catchment area is unrealistic when it comes to the work world, since the opportunity to provide some type of constructive work related activity may take place in any area of the total community. Our responsibility is to see that these individuals are trained to meet those demands, and not to shelter the individual within a stereotyped, geographically based resource which will be responsible for meeting his/her needs from cradle to grave. Therefore, a series of specialized training programs should be created within each county and area.

The theory that one facility in each catchment area of a county, particularly the size of Philadelphia, which will provide a full range of services perhaps should not be considered as a realistic solution to our service provision needs.

The incidence and prevalence of mentally retarded persons by demographic distribution would tend not to warrant such facility development. However, even more critical should be the program considerations relating to the population to be served.

The role of the projects to be funded under the DGS Plan for Pennhurst Dispersal was, and will continue to be, to provide the day activities necessary to support residential placements in the community.

In all planning, there should be consideration that "other catchment areas will be served dependent on available space." This is not only a programmatic consideration, but also one of space. This is to allow for the interchange of clients to provide the most appropriate *milieu* for training.

As we examine the program needs of the four levels of retarded persons eligible for habilitation services as they are processed through our multiple delivery system, we will tend to find:

1. A small group of individuals who require evaluation (medical, psychological, social), and upon adequate evaluation may be placed directly into a competitive job or into non-job training. (Philadelphia Association for Retarded Citizens has, for example, 400 slots under a Federal Program for on job training placement.)

2. Another group of individuals may require diagnostic evaluation and placement in a work-oriented evaluation program prior to immediate job or training placement. This population should be required to move into generic programs where these services are currently available.

3. Another population may require diagnostic evaluation, vocational evaluation, and sheltered employment. This population may require long term type training, but when at any point their proficiency increases, they should move into another program component.

4. The final group are those who are considered occupational day center candidates who, because of the severity of their handicap, may not be considered eligible candidates for any significant work productivity.

We know this can be misleading, so even this population should be considered mobile; such that they may move into a sheltered workshop program or into the generic habilitation system.

The major consideration should be mobility at all times; but constantly reinforced is the mobility towards job productivity as well as geographical mobility.

The role of DGS-sponsored projects are to serve as a sheltered workshop and occupational day center. Therefore, we must not design our programs for clinical and educational services, but only include them when other generic resources may not be available.

The sites should be based on minimum square footage needs with attempts to utilize facilities in the range of 12,000-15,000 square feet. The space allocations developed by the local agency should concentrate on large areas geared to work-oriented program areas rather than small classrooms. Clinical and office space should be kept to a minimum.

It is anticipated that all 26 sites will fall within the guidelines for operation and each site will be designed to meet all of the physical plant and program requirements.

It is our hope that within a few years we will be able to demonstrate a viable system of service delivery.

PAMELA GUFFEY SAMUELS is Director of Institution and Program Support for the Pennsylvania Department of Public Welfare, Southeastern Region. She has responsibility for planning, review, development, and program delivery in all of the areas of service to the mentally retarded. Over the past 3½ years, she has been responsible for the planning and development of new vocational rehabilitation services for over 2000 clients, about half of whom are to be released from a large State School and Hospital for the Retarded. She brings to her present job degrees in Child Development, Elementary Education, and Special Education with an emphasis on the physically and multiply handicapped. Her doctoral work is in the area of Special Education Administration. Her work experience has included two years of teaching and research with severely and profoundly deaf-blind retarded children, two years of college teaching in teacher training and infant assessment, consultation and in-service training for public schools, and five years of administration of state services to the mentally retarded. Mrs. Samuels has very recently been involved in working with architects and engineers to create innovative services for the total rehabilitation of the deinstitutionalized population in Pennsylvania.

Elwyn Institute: A Changing Role for a Residential Facility

Marvin S. Kivitz

Abstract. Recently large institutions have been characterized as dehumanizing, inflexible, self-serving facilities. In sharp contrast, Elwyn Institute provides an impressive progression of comprehensive education, training and rehabilitation services designed to meet the needs of a large residential and day population. The Institute works closely with local agencies in filling gaps in existing community services and making its programs and expertise available to fill these needs. Elwyn has pioneered the development of work activity centers, sheltered workshops, community work programs and group homes. The Elwyn model has been employed in developing comprehensive satellite rehabilitation facilities which are helping to meet community needs in several states.

"Large" institutions for the retarded have been depicted as being archaic, dehumanizing and inflexible facilities. Recent studies in Canada, England and the United States have indicated that many small facilities and group homes can be dehumanizing and devoid of services if not properly operated and supervised. Thus, it is not the size of a facility that determines its value, but rather its organizational structure, staff and basic philosophy.

Elwyn Institute is dedicated to providing education, training and rehabilitation programs which permit each individual to progress to the limits of his capabilities. An attempt is made to have each student feel productive and worthwhile regardless of his limitations. A graduated progression of programs has been developed. The programs are self-evaluating in nature and without time limits. As the in-

dividual matures, develops and displays increasing competency, he is moved to the next higher level in the progression. All students below the age of 21 are provided with a comprehensive education program five full days a week. As the individual matures, increasing emphasis is placed on vocationally oriented activities.

People are referred to Elwyn Institute from all over the world by physicians, educators, organizations and agencies. Locally, Elwyn receives referrals from community schools and intermediate units, as well as pediatricians and mental health/mental retardation centers. Elwyn now serves over 800 residents and approximately 475 day students. The satellite programs provide community services for an additional 700 people.

At the time of admission, a comprehensive evaluation including psychological testing, audiologic screening, and neurological examination, is provided so that appropriate educational programs may be prescribed. Over 30% of the referrals have significant hearing losses which have to be taken into consideration in rehabilitation planning. Many of these individuals have been in programs where this defect has been undetected. Psychological testing is done in order to gain a picture of the current functioning level of the individual so that individualized program plans can be developed. Experience has indicated that diagnostic labels have relatively little relevance to rehabilitation planning for the individual.

For those students requiring residential care, Elwyn provides an attractive, stimulating physical environment. A full range of recreational services enrich the lives of residential students. Special education classes are available for both residential students and day students who are transported from every school district in Delaware County. Children below the age of three are enrolled in Elwyn's infant stimulation program and receive vital sensory, perceptual-motor and language stimulation. A preschool language acquisition classroom for 3-, 4- and 5-year-olds focuses on language stimulation and enrichment. In the language classroom daily individual language training and parent counselling are used to teach non-verbal children a functional language. The Davidson Program consists of special education classes for children with multiple handicaps including mental retardation, brain damage, emotional disturbance, and visual and hearing impairment. Children are grouped into a variety of individually designed programs to provide prescriptive teaching and training. Academic foundations, career training, and pre-vocational classrooms are equipped to deal with children at all levels of mental handicap. A full complement of ancillary service specialists supplements classroom instruction with manual language training, physical therapy, remedial reading, speech therapy, library services, home economics, adaptive physical education and swimming. Elwyn's audio-visual department allows students the opportunity to participate in the taping of TV broadcasts and provides needed feedback for help in improving personal appearance and social adjustment. Elwyn students participate in scouting programs, as well as religious services for all major denominations.

Students between the ages of 16 and 21 years attend a Work-Study Program which emphasizes community living skills, and also receive work training within the community or school setting. The program allows the students to begin the process of career preparation and occupational choice while still in school and ensures that classroom instruction is relevant to the needs, interests and abilities of each individual. Conscious effort is made to involve the individual in decision making processes involving program choices. Student motivation is maintained by participation in sports, community trips, driver education, social events, and recreational activities. Work-Study students participate in a formal graduation upon completion of the program and receive diplomas from their home schools or from Elwyn Institute.

Upon graduation students enter the vocational training and rehabilitation phase of their program. Again, assessment is a key factor in prescribing needed remedial programs. Part of the evaluation process includes an exploratory work experience. During this period, students rotate among various vocational assignments in order to familiarize themselves with available training opportunities and to form job preferences. A hierarchy of vocational training opportunities is provided with increasing demands and responsibility required in step-wise fashion as the individual progresses through the training program. For students with minimal work ability, an Adult Adjustment Program is available for instruction in pre-vocational skills. The aim of the Adult Adjustment Program is to prepare the individual to graduate into work activities or sheltered work shop programs, which Elwyn maintains on the Campus.

A sheltered contract workshop is used to teach basic work habits and knowledge. Elwyn Industries, as the workshop is labeled, secures packaging, sub-assembly and other non-skilled jobs on a contract basis from local businesses and industry. The workshop is operated on a non-profit basis. Money derived from contracts is paid to workers on a piece-work basis in conformance with standards established by the United States Wage and Hours Commission. Elwyn Industries provides gainful employment for many persons who require sheltered employment opportunities. The use of specialized equipment, such as the skin packager, and individualized teaching techniques allow Elwyn Industries to maintain a factory atmosphere and high levels of production. In addition to the contract workshop program, Elwyn provides vocational training in a number of occupations suitable for the handicapped. Courses available include business education, janitorial services, dietary and food services, power sewing, printing, hospital aide training, baking, and laundry services. While the students receive vocational training, they are also enrolled in adult education classes for instruction in basic social competencies requisite for community living. Individual and group counselling, or Personal Adjustment Training, helps students in dealing with social and emotional problems associated with mental handicap or institutionalization.

After completion of vocational training, an individual may be enrolled in the community work program. This permits an individual to be employed in the community at regular going community rates, while he continues to reside at the school, receiving the required and individual counselling and adult education necessary for community adjustment. At the completion of his vocational training and habilitation program at the main campus, a student is eligible to enter Elwyn's halfway house program. One floor of Chestnut Hall, a residential hotel in West Philadelphia, is used for this purpose. Chestnut Hall provides a transitional experience for Elwyn students being trained for independent living and competitive employment in the community. Students share apartments and are provided with an opportunity to apply skills learned during their training program. They commute to jobs using public transportation facilities. They also continue to receive adult education and counselling during this phase of the program. Success in the transitional program leads to discharge. Many Elwyn graduates now live independently in the community and work at competitive jobs in business and industry. Others may continue to require some degree of supervision while residing and working in the community. An Alumni Club provides social and recreation opportunities for graduates and provides informal support and guidance.

The success of Elwyn's programs has created a demand

for application of the training methods at other settings. Community need has resulted in the establishment of a variety of satellite programs. A comprehensive rehabilitation program has been established at the Elwyn-West Philadelphia Rehabilitation Center. Elwyn community workshop programs have been developed in Media, Pennsylvania; Wilmington, Delaware; and Fountain Valley, California. In Upper Darby, Pennsylvania, an Elwyn vocational program offers rehabilitation services to individuals with social and emotional problems. A variety of halfway house and aftercare services have been developed in Delaware County and Philadelphia to serve individuals coming from other institutions or who have resided in the community until parents are no longer able to care for them. These services not only form a transitional bridge to the community but serve as alternatives to institutional placement.

In each of these settings, as on the main campus in Media, Pennsylvania, Elwyn continues the tradition of providing quality programs to help the mentally handicapped individual function at his highest potential.

MARVIN S. KIVITZ, PH.D., Vice President for Programs at Elwyn Institute, Elwyn, Pennsylvania, received an M.A. in Vocational Counselling from Teachers College, Columbia University, and his Doctorate in Clinical Psychology from the University of Pennsylvania. He has served as Vice President (Vocational Rehabilitation Division) of the American Association on Mental Deficiency. He has been consultant to the Rehabilitation Services Administration of the Department of Health, Education and Welfare, as well as consultant to the Delaware County Association for Retarded Citizens and the Philadelphia Board of Education.

Horticulture: An Excellent Therapeutic and Rehabilitative Environment for the Mentally Retarded

Earl Copus, Jr.

Abstract. Horticulture as a medium for rehabilitation or therapy has been in existence since man's earliest involvement with plants and the soil. However, it is only within the last few years that it has become professionally recognized and gained wide acceptance. Today, six major universities offer B.S. degrees in horticulture therapy. A professional organization, The National Council for Therapy and Rehabilitation Through Horticulture, founded in 1973, has over 700 members throughout the United States and other countries. Programs serving all types and levels of disabilities are finding that horticulture offers exciting enrichment experiences or comprehensive development environments. In particular, programs serving the mentally retarded are rapidly starting new or expanding old programs to include a horticulture unit. Horticulture has been proven to offer many natural advantages for community integration, organizational purpose, budget, personnel, programming, and competitive and sheltered work opportunities.

Since the first day that man "scratched the soil" to provide himself with food and shelter, a therapeutic relationship has occurred between man, the plants, and the earth. This relationship not only offered nourishment and protection, but provided equally important physical and mental strength.

Whatever the aesthetic, mental, and physical reasons, man has always acknowledged his appreciation of plants and the good earth. He shows this through his art, his vocation, his leisure activities, and by surrounding himself with plants. Today, this relationship is being increasingly appreciated, perhaps because industrialization has transformed our environment from earth into concrete and asphalt. In particular, the segment of our population referred to as "the handicapped," and those programs serving them, are recognizing the special therapeutic and rehabilitative assets of the horticultural environment.

For the purposes of this paper, discussion of the therapeutic and rehabilitative aspects of horticulture will be limited to the handicapped population classified as mentally retarded.

World-wide, institutions have historically utilized farming and other outdoor and indoor horticultural activities to assist in the treatment of their residents. It is only within the last few years that any major national or international organization has specifically addressed and supported the discipline of horticultural therapy/rehabilitation. Recently students have been able to pursue technical, graduate, and doctoral studies in the field of horticultural therapy.

Today, in many countries of the world, diversified plant/people programs exist serving all major groups of disabled — the visually impaired, hearing impaired, mentally ill, mentally retarded, elderly, and the physically handicapped. Those involved in the plant/people programs are beginning to communicate, exchange information, attend professional meetings, develop standards and promote research through an organization known as the National Council for Therapy and Rehabilitation through Horticulture (NCTRTH). The National Council, founded in 1973, has over 700 individual and organizational members representing the U.S.A., Canada, England, New Zealand, and the Nationalist Republic of China. Over 50% of the members are individuals and organizations associated with the mentally retarded. In addition, during the last year, 68 requests were received by the Council seeking information on starting new programs serving the retarded — particularly the severely retarded.

What are the reasons behind the recent groundswell of interest in horticulture and the retarded? The answer is simple. As therapeutic programs in the United States and abroad (such as the Melwood Horticultural Training Center) continue to publicize their accomplishments, the educational, therapeutic, and rehabilitation professions are discovering that horticulture is another tool which can be utilized to enrich and expand programs for the retarded.

Most endeavors to serve the retarded are sensitive to five basic concerns: (a) community integration, (b) organiza-

tional purpose, (c) budget, (d) personnel, and (e) program design. Again, the horticultural environment offers attractive alternatives to each concern.

Community Integration

According to the Principle of Normalization, programs serving the retarded should be a part of the community in which the retarded individual and his or her family live. Therefore, basic community acceptance, support, and participation are essential. Because parts of most elements of a community structure (economic, educational, recreational, civic, family) relate to plants, a natural understanding and avenue of communication and interaction already exist. Horticulture naturally creates a continuum of opportunities for integration into community life, fostering acceptance, support, and participation.

Organizational Purpose

The purpose of a horticultural program can be varied to meet the needs of individuals; the benefits of the plant world are so numerous that they adapt to most levels and types of programs. Day care, work activity, vocational education, special education, sheltered work, and competitive employment can all be the focus of a horticultural program. For example, horticulture may be utilized only as an enrichment activity, such as in growing plants indoors under lights. Or as with many adult level activities, it can be a comprehensive program integrating evaluation, adjustment, vocational training, and employment with the diversified horticultural environment.

Budget

Various horticultural media allow budgets (start-up and operational expenses) to vary according to one's financial capability and program needs. Many therapeutic programs start with indoor and outdoor plant projects which require little direct-dollar investment. Even when construction expenses are required, they are small in comparison with other similar physical facilities. A 3,000 square foot greenhouse training/production area costs $2-$3 per square foot versus $15 - $18 for a similar square foot cinder block building facility.

The nature of the horticultural environment usually implies utilization of community facilities, thereby further reducing usual costs associated with a self-contained facility program. Finally, the self-earning power created from the sale of plants and grounds maintenance service can generate income.

Personnel

Horticultural programs have demonstrated that the attractiveness of the work environment (working with people and plants) appeals to both the socially and technically-trained individual. Because of this fact, a number of colleges and universities are graduating "horticultural therapists" who have training in social and technical skill areas. The graduates represent associate, graduate, and post-graduate degree programs.

Program Design

The horticultural environment appears to be a natural asset as it relates to the evaluation, personal adjustment, socialization, pre-work, vocational training, and employment needs of the retarded.

Evaluation. Normally, standardized tests are administered. Then an on-the-job work evaluation is required, especially for the more severely retarded individual. The greenhouses, plant shop, garden center, field crops, community sales, grounds maintenance, landscaping, and work shop manufacturing of horticulture-related wood products and equipment repair offer diversified work stations where fine and gross motor development, individual and group productivity, social skills, and mechanical and non-mechanical abilities can be evaluated.

Personal Adjustment Training. Horticultural activities provide a variety of environments through which behavioral plans can be easily interwoven, creating optimum motivation for positive individual, peer, and supervisory adjustment and change.

Socialization. Because of the natural community interaction which horticulture opportunities encourage between sales and grounds maintenance programs, socialization (community life interaction) occurs daily. The "double reward" is that in addition to the social development of the retarded individual, the general public also learns to respect retarded persons for what they can do rather than for what the public usually thinks they cannot do. A more positive attitude toward the retarded can be developed.

Pre-Work and Vocational Skill Training. In order to help someone reach his or her full vocational responsibility and productivity potential, plus acquire specific technical skills, the person must be motivated and experience success based on self, peer, and community appreciation. The growing and care of plants, the selling of one's own grown products, the maintenance of extensive grounds, and the landscaping of homes and businesses, are all excellent motivators and reinforcers which are necessary for initial stimulation and continued growth. Each of these areas is ideally structured for grouping trainees into "crews" of five to six individuals of both low and high levels of abilities. As a result a total crew strength is stronger than each separate individual ability.

Employment. Experience has documented that before anyone can become employable, he or she must develop a basic level of personal work responsibility and productivity. Once this occurs, responsible and productive employment can take place in a variety of non-skilled jobs. Horticulture has proven to be an excellent environment in which to develop the total person.

Case Studies

Melwood Horticultural Training Center, Inc.

In 1963, a group of parents belonging to the local Association of Retarded Citizens obtained six acres of government surplus land and initiated the Melwood Horticultural Training Center. Their belief was that the horticultural environment offered many stimulating indoor and outdoor work training opportunities, which would lead to employment. From the shelter of a tent and a budget of $10,000, a one-man staff and six trainees began proving that the original belief was well-founded. Civic groups offered their support, and week-end building began on Melwood's physical plant, supporting offices, and work labs.

Today, 13 years later, Melwood is still utilizing civic donations and labor, along with grants and bank loans. The Center now consists of four major physical facilities: Melwood Horticultural Training Center, Melwood Farm, Greenways Work Co-Op, and a Residential Group Home. Melwood services over 150 students in daily programs. Special activities such as evening enrichment classes and a summer camp program also serve the students. Training programs offer evaluation, counseling, independent living (ADL), work activity, vocational training, evening enrichment classes, summer camp sheltered work co-op, residential group home, employment and follow-up services. The budget has increased from a 1963 level of a few thousand dollars to over one million dollars. Approximately 40% of the budget is self-earned from the sale of plants and service.

Melwood is recognized as a leader in horticulture and

the mentally retarded and has a leadership role with the National Council for Therapy and Rehabilitation.

Melwood highlights:

- Community acceptance/support/participation
- Recognition (Accreditation) by the Mental Retardation Administration, Board of Education, Division of Vocational Education, Community Fund, and Fellow Rehabilitation Programs
- Graduates earn over $1,000,000 annually in competitive employment
- Greenways, a sheltered work co-op, which employs 24 people in grounds maintenance work
- Extended socialization camping trips, involving staff and student travel for one to two-week periods
- Crew approach to training and sheltered work

Laurel Ruff Center

At the Laurel Ruff Center of the San Juan Unified School District, Sacramento, California, a work crew approach is used to train the severely retarded. In one study, four to six boys were trained in such job areas as the clean-up of recreational facilities, lawn maintenance, weeding, and trash removal. The program's success after 4 years indicates a potential alternative to the terminal sheltered workshop employment of the severely retarded and an area of expansion for a school vocational program.

Department of Special Education, Southern Illinois University

An 18-week residential program for mentally retarded males has been established under the supervision of the Department of Special Education, Southern Illinois University. Three weeks of skill evaluation are followed by 15 weeks of Vocational Adjustment Training in five different work situations. Two areas of training are the University Greenhouse, where standard greenhouse procedures such as mixing soil and potting plants are taught and the Illinois Fruit Growers Exchange, a fruit warehouse operation where skills include sorting and storing fruits, and loading and unloading trucks. Work placement and follow-up are provided after the trainees complete the program.

The Home of the Guiding Hands

The Home of the Guiding Hands in Southern California is a private, non-profit, residential facility for the mentally retarded, developed under the auspices of the Lutheran Church in the mid-1960's. In 1972, the Home decided to add horticulture to the other rehabilitation programs. Since funds were not available through the facility budget, parents and friends raised the money to construct the greenhouse, potting shed and plant shop. Professional horticulturists gave their services in planning and lawn and grounds maintenance.

Whitten Village

The program at Whitten Village in Clinton, South Carolina, developed through cooperative efforts of the Department of Horticulture, Clemson University, Clemson, South Carolina; the State Board for Technical and Comprehensive Education; and the Governor's Horticultural Advisory Committee. Since 1972 it has provided on-the-job training in a commercial atmosphere. The program is diverse, including greenhouse, nursery, landscape construction, and maintenance.

Selinsgrove State School and Hospital

After training in a program at DeWitt State Employment Service, residents of Selinsgrove State School and Hospital, Pennsylvania, are employed as seasonal workers for the harvest of potatoes, tomatoes, and apples. They are paid the same wages and treated the same as other seasonal workers.

Kfar Nachman Institution

Work with groups of male retarded individuals at Kfar Nachman Institution near Tel Aviv, Israel, is aimed at rehabilitation through work in agriculture. In one study, two groups were at a mean chronological age of 20, with mental ages of five and four and one-half. After a series of activities designed to create motivation for work via a group and the feeling of belonging, work groups were created and developed into productive units paid on a piecework basis. They reached 40% of the productivity of trained agricultural workers and were paid accordingly. The group learned to walk to work and to allocate and execute work without continuous supervision.

EARL COPUS, JR., is Executive Director of the Melwood Horticultural Training Center, Maryland, where vocational training programs are administered to 150 mentally retarded individuals yearly. Major programs include the operation of a suburban horticultural facility, a rural farm complex, a community group home, and a sheltered work program in grounds maintenance. He has conducted numerous speaking engagements across the United States and abroad concerning horticulture and the handicapped, has authored articles and research projects, and founded the National Council on Therapy and Rehabilitation through horticulture.

PART IV

Rehabilitation Programs In Various Countries

Post-Graduate Courses in Medicine, Psychology and Education For Service to the Severely or Multiply Handicapped Retarded Person

Thomas A. Figari

Abstract. The importance of a multiple-disciplinary approach to the education of severely or multiply handicapped retarded persons is discussed in light of the history of special education in Argentina. This approach facilitates understanding and acceptance of the mentally retarded. A program to implement this approach at the Neurologic Service of the Buenos Aries Children's Hospital is discussed.

Argentina has a positive tradition in the development of teaching staff for the mentally retarded. Public Education Law No. 1420 was promulgated in 1884 and among its promoters was Domingo Faustino Sarmiesto, who came to Argentina in order to share ideas and bring teachers to this country. In the field of special education, the first steps toward the development of an educational staff are in the field of sensory failure (blind and deaf persons). For mental development failures, our almost century-old law states in its first article that "intellectual and physical development of our children, from the age of six to fourteen, must be favored" and in its second article "teaching must be gradual and according to hygienic principles." Individual development of the child is taken into account and the basics of special education are covered by the law; however, pre- and post-school stages are not considered, nor are severely or multiply retarded persons.

School training has always been concerned with the basis of reading and writing — formal learning; in fact, during the forties, the first special schools demanded an intelligence quotient of greater than 50 for admittance. There was also a rule (its date is unknown) which said "Epileptics and Mongoloids will not be admitted because of their low mental level and the stigma attached to them."

We recognize, however, the efforts of teachers and physicians of that time, among them Carolina Tobar Garcia, who clearly presented the pros and cons of differential grades in common schools and also the importance of an autonomous Special School.

The Ministry of Education of Argentina has never planned the establishment of the type of institutions about which this Seminar is concerned; emphasis has been placed on family integration. In cases where the family constellation is conflictive, the Ministry of Social Help, through its Public Health Department and The National Institute of Mental Health, places the retarded person in boarding school institutions which it controls.

At the present time, our neuro-psycho-pedagogic course in the Profesorado de Insuficientes Mentales of the Instituto Nacional Superior de Pegagogia Diferenciada identifies several degrees of mental deficiency and their multiple disabilities. Methods of treating these problems are covered in the courses that are given on a multiple disciplinary level (for physicians, psychologists, and teachers) in order to qualify them and bring them up to date. These courses are offered in the School of Medicine of the University of Buenos Aires. Other professionals are studying differential psychology and neuro-psycho-pedagogic problems at the John F. Kennedy University of Argentina.

All of these professionals take part in the activities that are performed in Buenos Aires Children's Hospital in its neurological service and in the different special schools, as well as in the Therapeutic Communities for mentally deficient youths, their parents, and friends. We follow a philosophy of trying to obtain from the professionals their active incorporation and participation in the groups and places where everyday assistance and orientative work are given to the mentally retarded, trying to remove these professionals from the role of simple spectators to increasingly responsible roles. This is why our philosophy encourages a change in the attitudes of the professionals (teachers, psychologists and medical doctors) and the acquisition of new habits of mind and new ways of behaving towards the mentally retarded,

particularly towards the severely retarded with multiple disabilities.

The importance of these techniques is emphasized in the following section which summarizes the results of several weekly meetings of professionals with mentally retarded youths and professionals with parents of the youths. Such techniques have also been implemented by way of talks given to community groups and to teachers and students in primary and secondary schools and colleges.

Therapeutic Communities

The experiences of a group of professors, doctors, psychologists and teachers who are working for the integration of the mentally retarded into the community and at the same time the integration of most of them into a work situation were summarized at the Second Ibero-American Congress on Mental Deficiency as "Balance, community life, and the socio-cultural relationship of the mentally deficient in the Argentine Republic." Weekly meetings of the so-called Therapeutic Communities were held at the Neurologic Service of the Buenos Aires Children's Hospital. Our methodology corresponds to the learning techniques of group participation, also emphasized in talks given to community groups, and to teachers and pupils in primary and secondary schools and colleges. The Neurologic Service also works on the evolutive control of the young who have suffered different illnesses or who are recovering from serious damage.

These communities are made up of mentally deficient youths, their brothers and sisters, parents, family in general, and their friends. These groups are subdivided with two other groups: (a) all of the mentally deficient youngsters who work with a psychologist and a professor to coordinate and collect impressions, thoughts, interests, questions and other subjects proposed by the youngsters, and (b) the parents who work with the doctor to learn that they share the same problems and doubts. The first group allows the youngsters to express their feelings and to say what they wish to do.

The following subjects have emerged from the meetings:

1. First group — mentally deficient youths:
   friendship
   their work at home and away from home
   sexual problems
   problems of death and birth
   their role in society
2. Second group — their parents:
   military service
   work situations and legislation
   communication with friends and neighbors

All these problems are being studied by our group of professionals to allow mentally retarded youths to develop their lives as normally as possible and to be accepted and helped by society.

We consider that only through these phenomenological meetings will the professionals, parents, relatives, friends, and the whole community understand, accept, and help mentally retarded people to be integrated in the family, society, and work.

THOMAS A. FIGARI is a physician specializing in the field of mental deficiency. For over 30 years he has engaged in research and education programs relating to the problems of mental handicaps. He specializes in neuropediatrics at the Children's Hospital of Buenos Aires in the Department of Learning Disabilities and is inspector of the Department of the School of Medical Service for Mental Deficiency.

He was the organizer and founder of the Instituto Nacional Superior de Pedagogia Diferenciada (Superior Institute for Special Pedagogy for the Mentally Deficient), where he initiated the course of Neuropsicopedagogy.

He is currently Professor of Special Psychology for the mentally deficient and the problems of Neuropsicopedagogy at the Argentine John F. Kennedy University and Assistant Professor in the course of Pediatrics. He teaches students and professionals at the Medical Faculty of the University of Buenos Aires. As a founding member of the Argentine Association for the Scientific Study of Mental Deficiency he served as its first president in 1967. He was also responsible for forming the Ibero-American Association (AILA) and the Federacion Argentina de Entidades Proteccion del Deficiente Mental (FENDIM), the Parents and Friends of the Mentally Deficient in 1968, and is a member of the Council of the International Association for the Scientific Study of Mental Deficiency.

The Caribbean Institute For Mental Retardation as a Vehicle For Change In Rehabilitation

Carol Tucker

Abstract. Objectives of the Caribbean Institute for Mental Retardation (CIMR), a technical-professional institute, outgrowth of the Caribbean Association on Mental Retardation (CAMR), are summarized. The CIMR provides support services to the CAMR in the form of facilitation, leadership, development and utilization of local resources, and funding for the Caribbean region. Major contributions to date have been to plan training courses, and to identify material and personnel resources. Continuation of these technical services is dependent on continued funding.

The pattern of development of services for the mentally retarded and developmentally disabled has displayed certain

common features of significance throughout the countries of the world. Two of the most important of these are that:

1. Parents and friends of the disabled as well as people of goodwill organize activist groups to develop basic services and/or to cause their development by the relevant government and public authority.

2. After establishing themselves firmly and having achieved some successes, these citizen-action groups amalgamate into large national, regional or international entities in the interest of greater strength and political clout. The services in the Caribbean countries have displayed these two characteristics very sharply. Over the past two or three decades, organizations for the retarded have been organized in several of the countries and have been very active in working for their welfare. Finally on October 12, 1972, at the Caribbean Association on Mental Retardation (CAMR), a regional federation of such groups operating within some 20 territories of the Dutch, French, English and Spanish-speaking areas of the Caribbean and the South American littoral, was officially organized at a General Assembly of the Second Caribbean Congress on Mental Retardation held in San Juan, Puerto Rico, October 8-12, 1972.

The CAMR, which was organized on the basis of a Secretariat and an Executive Committee, was created with the following objectives:

1. To review all work being done for the retarded and mentally handicapped and to encourage such work;

2. To cooperate with, and inform and advise all Governments of the Caribbean with regard to the welfare of the retarded;

3. To foster collaboration between organizations of and for the retarded;

4. To stimulate the founding of organizations of and for the retarded where none exist; and

5. To develop appropriate international and referral contacts.

Despite an absence of paid full-time staff and a lack of funds, the CAMR has been successful in meeting its objectives: (a) It publishes a newsletter which is circulated regularly to member associations and other interested parties. (b) Several short seminars and consultations have been staged concerning curriculum development, special education, and management of the handicapped child, as well as other areas. (c) Through the impetus of the CAMR, associations for the mentally retarded were formed in Antigua, Grenada, St. Lucia, Dominica, St. Vincent, Martinique and Puerto Rico. (d) Extensive contacts have been developed with international organizations for the retarded, including the President's Committee on Mental Retardation, the International League of Societies for the Mentally Handicapped, the National Association for Retarded Citizens, and the Canadian Association on Mental Retardation. (e) Useful contacts have been maintained with the governments of the region. (f) Many aspects such as direct services to the retarded and handicapped have been developed through the CAMR and its member associations. Despite its enviable track record and pioneering efforts, the CAMR has been unable to develop and maintain a momentum sufficient to ride the awakening tide of concern for the retarded and disabled that is becoming evident throughout the Caribbean. A shortage of funding and an absence of a consistent and specific thrust in the interest of the retarded has forestalled this. It was out of this situation that the idea of a socialized agency for mental retardation grew and developed to the stage of the authorization of the Caribbean Institute on Mental Retardation and Developmental Disabilities (CIMR) on January 1, 1976, as the technical professional arm of the CAMR with the help of the National Association on Mental Retardation, Canada.

The CIMR was conceived as a non-service facility capable of utilizing resources to provide all necessary support services to the CAMR and its constituent member associations and the governments of the region in the field of mental retardation. This kind of model seems particularly appropriate to the Caribbean situation where:

1. One is dealing with a group of developing countries with limited resources;

2. Resources for the mentally retarded are fragmented in each country and unevenly developed through the region;

3. Governments of the region are evincing greater interest in the handicapped members of their population, but require assistance in planning and consultation;

4. A fairly well developed network of educational and research activities exists throughout the region consisting of the University of the West Indies, the Caribbean Food Nutritional Institute, and the Institute of Social and Economic Research;

5. There is a need to bridge the research-practice gap by beginning specific research into mental retardation and the handicapping conditions and communicating with workers in the service-delivery area; and

6. There is a tremendous shortage of manpower and a need for programs of training of professionals and paraprofessionals.

The CIMR, as it has developed, is a technical-professional institute on mental retardation which is committed to:

1. The maximum possible development of the mentally retarded and developmentally disabled;

2. Their integration into the mainstream of community living;

3. The development of comprehensive community-based services; and

4. The development and utilization of local manpower resources.

Its objectives are:

1. To provide, identify and facilitate professional leadership and expertise in the mental retardation field;

2. To identify and develop a pool of local skills, knowledge, resource, materials, programs and information to be made available to governments, agencies, and organizations in the region that require such assistance;

3. To provide short-term training courses and seminars in areas of priority needed to upgrade the skills and knowledge of local professionals;

4. To assist in the training of professional groups by providing expertise in this field to ongoing training programs;

5. To facilitate the channelling of funds and expertise from international organizations to the region; and

6. To stimulate the development of operational research, especially of innovative service programs, epidemiology, behavioral and cultural problems peculiar to the region.

Initial funding of the Institute has been through a grant from the Non-Governmental Organization Division of the Canadian International Development Agency (CIDA) and channelled through the National Institute of Mental Retardation in Canada. The grant is for C$50,000 for the first 2 years with the possibility of a further C$50,000 over the succeeding 2 years after evaluation. The CIDA grant has served mainly to provide "seed money" for the launching of the Institute and allowed it to begin the work of developing and disseminating information, identifying resources (of personnel and materials), initiating some training programs and setting priorities for research. The continued development of the institute is predicted on the acquisition of substantial funding in the very short run.

Structure of CIMR

The offices of the CIMR are sited *pro tem* in Kingston, Jamaica. Its permanent paid staff consists of a part-time Director, an Executive Assistant and a Secretary. The Executive Board of the CAMR serves also as the Executive of the CIMR. In each active member state there are volunteer liaison personnel who link with the CIMR and carry out its work with the cooperation of their respective governments and organizations for the mentally retarded. CIMR also liaisons with the CAMR Secretariat, which is an administrative section.

In addition, there are four distribution and translation centers sited in Haiti, Puerto Rico, Surinam and the Dominican Republic, and three research committees mandated to focus and develop research on bio-medical aspects of mental retardation and in education and vocational rehabilitation.

Activities of CIMR

The CIMR has already staged one course on management of the handicapped and has plans for further courses on:

1. Early stimulation of handicapped children
2. New trends in mental retardation
3. Options in training and placement of the handicapped adults
4. Management of severely handicapped children
5. Basic research methodology for staffers in service delivery systems in mental retardation in the Caribbean
6. Special education program planning for senior education officials in the region.

Resources of materials and personnel in mental retardation in the Caribbean have been identified and a *Directory of Services for the Handicapped in Jamaica* published. Early publication is planned of a similar directory for the entire Caribbean and an inventory of personnel working in the field in the Caribbean.

The CIMR has demonstrated during its 8 months of existence that it fulfills a clear need for the technical-professional services it is focusing on and that it can be even more effective providing it is properly funded. Plans are under consideration to develop a Regional Materials and Resource Center to serve as a framework for training research, and information dissemination. It is also heartening to note a report that the Institute Model is receiving wide study with the possibility of its implementation in other countries including Australia and New Zealand.[1]

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Rehabilitation of the Mentally Retarded in Egypt

Salah El-Din El-Hommossani

Abstract. A brief history of the program for the rehabilitation of the mentally retarded is given. The process of evaluation and placement of mentally retarded children and the services available to them are described; and a brief history of research on mental retardation in Egypt is given.

In 1956 the National Conference on the Welfare for the Disabled issued a recommendation that calls for the establishment of a program for the care of mentally retarded persons in Egypt. Two years later, the Ministry of Social Affairs initiated a very modest program at Kobbah in Cairo. The program was the first step on the way for a more sophisticated program. In 1965, the Department of Rehabilitation for the Handicapped addressed itself to the problem. The following steps were taken: (a) A comprehensive rehabilitation scheme was worked out to face the problem of mental retardation; (b) the existing facilities were classified to function as an integrated program; (c) professionals were invited to contribute to our work; (d) a sample survey on the size of the problem was designed; and (e) a plan for new facilities was prepared.

These steps led to an enlightened view of the problem and how it could be faced using our local resources and international programs.

In 1966, a cooperative research based on a grant from the Rehabilitation Services Administration, Department of Health, Education and Welfare in the United States was launched, aiming at a research work to cover: (a) identification of the size of the problem; and (b) indication of different aspects of the rehabilitation potentialities of the mentally retarded person.

The research continued for 5 years and resulted in the recognition of an urgent need to establish a demonstration research and training rehabilitation center for the mentally retarded and the realization that the mentally retarded person can be easily integrated in the society if his rehabilitation needs could be met on a scientific basis.

However, by mid 1972, the new Center at Mataria District in Cairo was opened and fully operational and consequently, a new era in the rehabilitation for the mentally retarded in Egypt was begun.

It was revealed in the survey conducted in Cairo City in 1967 that we are no exception to the well-known normal dis-

[1] International Models to Research Utilization, G. Allan Roehr, in *Proceedings of the Fourth International Congress of the International Association for the Scientific Study of Mental Deficiency*, Washington, D.C.

tribution of population according to IQ. It was shown in the survey, which was conducted on a sample basis in Cairo City, that we have 3% mental retardation in the population. If we consider the 1976 estimation of the Egyptian population which is 38,000,000, we can say that we have to deal with a problem affecting more than 1,000,000 persons. It is a social, economic and educational problem.

Mental retardation may not be easily detected as early as other disabilities. It could, however, be perceived by the mother and/or the father in the first year or, if it is mild, it can be detected in the next 2 years. However, it is obligatory that every child in Egypt be enrolled in a primary school at his sixth birthday. The child must meet a complete medical evaluation before attending the school. The evaluation is run by the School Hygiene Department free of charge. At this stage, those who could not be identified by their families as retarded can be detected. It follows that the parents can apply to one of the special education schools for their children. Our educational system is run for all the citizens on a free basis. Special education is no exception to the rule. The child may be in the school for 8 years and he can realize achievement up to the third class. However, those who suffer profound retardation are not eligible for education.

The Ministry of Social Affairs laid its plan to integrate the existing services and to create a new model for rehabilitation services. Therefore, many centers were established to provide care and rehabilitation for the mentally retarded from the ages of 6 to 25. The following services are available for the retarded in our rehabilitation scheme:

Identification and Classification

In order to define eligibility and the kind of service needed, we established a classification unit. The team working in the unit is composed of a medical practitioner, an internist, neurologist, psychiatrist, social worker, psychologist and rehabilitation counsellor. A complete evaluation is done for the case including: a complete history of the child, social evaluation, educational and vocational history, general and specific medical evaluations, psychiatric screening, and psychological evaluation of general abilities (IQ), aptitudes, and interests.

Completing the full evaluation, the team can decide on the eligibility of the child, what center he can join and what are the following steps for him.

Extended Evaluation

Every child is given the chance for full screening and observation for about 3 months so that the staff is able to have a more sophisticated judgment of the child. The period serves also to discover those hidden symptoms such as epileptic attacks, and it helps in social and personal adjustment. At the end of the period, there will be a realization of complete information on the child. The decision on the admission or dismissal of the child is now a final decision of the team.

Rehabilitation Services

By the end of evaluation and extended evaluation the child who meets the criteria for eligibility is admitted to the center most fit for him, considering age, sex, IQ and his family residence.

The rehabilitation counsellors continue their work, starting with the referral of the case. The rehabilitation counsellor works with the client, his family and the team of the center. By considering the reports and evaluations, he can report on the diagnosis and arrange a rehabilitation plan for his client. The rehabilitation services in our centers include medical, psychiatric, educational, psycho-social and vocational services.

Medical care is provided for the children in different ways. On the recommendation and prescription of our doctors, we provide treatment and physical therapy. Every child is medically examined on a periodical basis and on every symptom observed by the nurses or expressed by the child himself. Physiotherapy has been found to be very valuable for those who have posture defects and/or other motorsensory limitations.

Our psychiatrists work with the cases to deal with any disturbances noticed by the nurses, social workers or reported by the psychologist. The psychiatrists help in planning for correctional and adjustment programs.

Coming from a special school or from his home for the first time, the child will receive an educational program relevant to his potentialities, aptitudes and background. Our educational program is managed on an individual basis and directed to realize the following: (a) It is vocationally oriented, i.e. the program will serve the vocational goal; (b) it must help in social and personal adjustment, and (c) it is a prevocational program for those of younger ages. The teachers who are involved in the program are from the Ministry of Special Education.

Psychologists and social workers cooperate to develop integration. The following are some of the programs directed to achieve such goals:

Residency. Cases of young children and those who face a risk in moving from home and back are able to be admitted as inpatients. In such cases they find a team of nurses, social workers and supervisors to work with them day and night.

Family Orientation. The family is given relevant orientation as well as counselling on how to deal with their child, what suitable attitudes must be developed, how can the child be accepted by the family, what is the family's role in the child's development and rehabilitation, and finally what support can the family provide to their child, the center and the community. Weekly conferences are held in the centers and attended by the parents and staff members to discuss different problems.

Social casework is carried out by well trained social workers who are able to face different problems and solve with cooperation of the family. Group work is carried out for recreational therapeutic purposes. The child has been found to develop his language through therapeutic group work.

Social and Personal Adjustment. This is a program designed by our senior psychologists, counsellors and social workers to meet the needs of the retarded person for learning daily living activities. In such a program the child can acquire skills of how to deal with persons, with money, transportation, how to discriminate colors, mail and how to behave in different situations.

Physical and Recreational Programs. Sports have been found of great value for the cases; therefore, we have a comprehensive sporting program. Recreational activities include music, plays, and movie shows. Summer camps are arranged every year in Alexandria where the children from all centers meet. There is an opportunity not only for them but also for their supervisors to exchange experiences. The psychologists, social workers and teachers find an opportunity to do some studies based on sociometry.

Miscellaneous. Other services are provided as training allowances, incentives and transportation. If the child is from a low income family, his family can be referred to the social security scheme.

The retarded persons from 12 to 25 years are due to receive vocational services as follows:

Vocational Evaluation. This type of evaluation is completed in real shops in the centers on the basis of extended evaluation. The rehabilitation team reports on the abilities, aptitudes and interests of the client and what vocation is right for his potentialities.

Vocational Guidance. Vocational guidance is the next step. Reports from the vocational evaluation unit are added to medical, social, psychological and educational reports to form the basic guidelines for the counsellor. The counsellor plays a very important role in vocational guidance. He must be able to manage counselling with direct or indirect methods both individually and/or in groups. The more we can have the client oriented to realistic goals the more we can expect success later on when he is employed. The interests of the client, the vocational potentialities in his family and the opportunities of employment in his environment are very important factors.

Vocational Training. Vocational training is provided both inside and outside the centers. For the mentally retarded we have the following trades: carpet and rug making, textile and weaving industries, knitting, pottery and ceramic making, woodwork and carpentry, bamboo working, leather work, photocopying, photography, printing, packaging and binding, office work, horticulture, and flower arrangement.

Placement Services

On completion of vocational training, the client is assisted in finding a suitable job. Our counsellors help the client and his family to get information on different work opportunities. Our placement officers get up-to-date information on the job opportunities. A significant ratio of our clients can find their way to a job in a big factory, firm or government, due to the law of rehabilitation recently issued (1975). The law has a quota of 5% handicapped persons to be employed in those firms who employ more than 25 workers. Those who fail to find work or cannot compete in the labor market can be aided in having a private business in the home or outside. We can safely say that we have succeeded in raising the rate of employment among our clients of moderate retardation to 100%.

The rehabilitation counsellor is assigned to follow-up the client in his work and family life. If he is assured that the client is adjusted to work and in life he can close the case.

The Multiply Disabled Mentally Retarded

The multiply disabled mentally retarded is commonly a person with disabilities like deafness, hardness of hearing, neurological and orthopedic defects. Identifying the needs of such persons to be rehabilitated in a specialized center, we have recently established a model center for multiply disabled persons. The center provides rehabilitation services for those persons who cannot be easily served in other places. The center is located at Giza near Cairo City and in greater Cairo. It has been revealed through work with the most severe cases that something could be done. A model building is being raised in Giza to meet the needs and fill the gap. Prevocational training is one of the pillars in the rehabilitation process for those cases. Training is provided for trades such as rug making, bead work, and knitting. Physiotherapy is another aspect that has proved to be very important. The rehabilitation process has had noticeable results.

Research

In the last 10 years we have been able to conduct scientific research on the problem of mental retardation. The following are some basic aspects of those research programs.

In 1966 we signed an agreement with the Vocational Rehabilitation Association, Department of Health, Education and Welfare to carry out a research project on the vocational rehabilitation potentialities of the mentally retarded in Cairo City. In that research project we were able to bring together the experience and academic persons to investigate such problems as:

1. The incidence of mental retardation and hence the size of the problem. A survey using a sample was carried out and useful indications were extracted.
2. Vocational evaluation and orientation techniques were investigated and the basis for extended evaluation was laid down to give the full opportunity for judgment.
3. Job analysis was made for some basic jobs. That technique enabled us to plan for prevocational and vocational training and for placement.

Table 1: Results of posture examination at the project in Mataria Center, February-March 1975 by type of deformity.

Training shops	DEFORMITY																																			
	Kyphosis				Lordosis				Scoliosis				Kyphosis + Lordosis				Lordosis + Scoliosis				Kyphosis + Lordosis + Lateral Curvature				Polio				Obesity				Several Deformities of Spinal Cord				Total Deformities				NORMAL	TOTAL
	1st		2nd		1st		2nd		1st		2nd		1st		2nd		1st		2nd		1st		2nd		1st		2nd		1st		2nd		1st		2nd			
Leather work	1		—		—		—		—		—		1		—		—		—		—		—		1		—		—		—		9		—		12		—		2	14
Ceramics	4		—		—		—		—		—		2		—		—		—		—		—		—		—		1		—		2		—		9		—		3	12
Works	1		—		—		—		1		—		3		—		4		—		—		—		—		—		—		—		2		—		11		—		4	15
Woodwork	3		—		—		—		1		—		—		—		1		—		—		—		—		—		1		—		3		—		9		—		6	15
Bamboo	1		—		—		—		1		—		—		—		—		—		—		—		—		—		—		—		1		—		3		—		1	4
Knitting	7		1		—		—		—		1		4		1		1		—		—		1		—		—		1		—		2		—		15		4		1	20
Resident cases	5		—		2		1		1		—		1		—		—		—		—		—		—		—		1		—		3		—		13		1		1	15
Total	22		1		2		1		4		1		11		1		6		—		—		1		1		—		4		—		22		—		72		5		18	95

4. Recreational programs and sports were planned by highly specialized experts which resulted in realistic and sound results in adjustment.

5. Psychiatric problems were dealt with for the first time in our facilities for the retarded. Psychiatric screening has become a basic item in evaluation of the retarded.

6. We have been able through the program to enrich the public with a full idea of the problem of mental retardation. Publications, conferences, press, radio and television were used as communication media.

In 1973 we had the second project with the Rehabilitation Services Administration. This project aims at the establishment of a comprehensive center for training and research. During the last 3 years, we have been able to achieve the following:

1. The widening of the vocational scope for the mentally retarded. They have been enabled to enter new jobs. Appendix 1 illustrates vocations and jobs in which the clients are employed.

2. We have led a study on posture deformities. Table 1 shows the results. As a service measure, we established a section for physical therapy to be used in posture correction.

3. A study on the chromosomology of mental retardation is being carried out at the present time.

4. Training courses are planned for the workers in the field to meet the training needs for the social workers, psychologists, nurses, training instructors, teachers and other concerned specialities. We think that through such training courses we have been able to progress in our work more efficiently.

5. We have produced a documentation film on the services rendered to the mentally retarded for the public.

6. We are planning to have a national conference on the problem in 1977.

We do think that the problem of mental retardation, existing everywhere in the world, is more liable to be made clear with urbanization and in cities; we therefore think that every city and town must have a comprehensive program for the mentally retarded. Vocational rehabilitation is the proper way to create a useful citizen. The retarded person can do many tasks if correctly oriented and counselled. For the integration of the retarded person in his or her community we prefer day centers to residential facilities.

Appendix 1
Major Fields of Placement for the Mentally Retarded

Metals industry	Publishing houses
Transportation	Printing
Ships industry	Metal furniture
Chemical industry	Air conditioners
Weaving and textile	Construction
Knitting	Car repairing
Starch industry	Electricity
Pharmacies	Dairy production
Cigarette industry	Hospitals
Supermarkets, shops	Ceramics industry
Silk industry	Social services
Newspapers	Furniture industry
Paper industry	Leather works industry
Governmental departments	Private business

SALAH EL-DIN EL-HOMMOSSANI is Undersecretary of State for Rehabilitation and Development for the Ministry of Social Affairs in Egypt. He is responsible for all the programs of rehabilitation of the handicapped people in Egypt. He started the program for the rehabilitation of the mentally retarded in Egypt in 1965 and by the end of 1972 was able to have other centers for the mentally retarded in Cairo besides the existing facilities. He is also the Secretary General for the National Society for the Mentally Retarded in Egypt and the principal investigator for a research project for rehabilitation of the mentally retarded supported by the United States (Rehabilitation Services Administration). He has participated in most of the international conferences for the rehabilitation of the handicapped during the last 10 years.

Recent Legislative Arrangements For Exceptional Children in Greece

Constantinos Tsimpoukis

Abstract. Since 1969, programs for the teaching of special education, the establishment of special education curricula in teachers colleges, the formation of a committee to study the mental retardation problem, and the preparation of a special education law have been the primary activities concerning exceptional children in Greece.

As in other parts of the world, so in Greece, society has evolved through various models toward a posture of public responsibility toward mentally retarded and other handicapped persons. We have moved from the *keadas* treatment to mercy (*oiutos*) and from mercy to duty (*xpeos*).

Over past decades, a model of vocational rehabilitation for handicapped persons which proposes maximum utilization of each person's capabilities, as well as personal satisfaction, has developed. This model emphasizes four essential elements of vocational rehabilitation in assisting the handicapped person:

1) to be in harmony with himself or herself;
2) to be in harmony with the environment;
3) to develop all of his or her aptitudes to the maximum, and
4) to utilize his or her abilities both for personal benefit and for the benefit of society, that is living as a functional and responsible citizen.

Evaluation teams responsible for the vocational habilitation and/or rehabilitation of mentally retarded persons provide first of all, training in independent living skills to the degree possible under the handicapping condition; provide opportunities for employment; and assist each individual in

reaching his or her maximum potential, whether in open, competitive employment or in non-competitive sheltered situation.

The first steps were made by private organizations which have tried to take care of physically handicapped children. After World War I, a movement was started for the mentally retarded and its results were the first law to be enforced in 1936, which made provisions for establishing a model school in Athens, to be followed by others in other cities. Due to World War II, the expansion did not become possible.

Thus we reached the sixties when there were many efforts coming from the Ministry of Welfare, Ministry of Education and mainly from the Parents Association for the Maladjusted Children. The result was private schools to be established by the Ministry of Welfare and private organizations.

It was in 1969 when, by decision of the Prime Minister, an office was established in the Ministry of Education. This decision served as a point of departure for other steps to be taken. Since we have taken the following steps:

1. The establishment of programs for educating teachers of educable mentally retarded persons. This was a semester program in 1971 and has developed into a two-year program since October 1975. The state provides scholarships to the teachers who pass the examinations to attend an in-service graduate program for two years.

2. The establishment of public schools for educable mentally retarded children in every Teachers' College in all cities with a population of 40,000 or more (in the beginning) and 20,000 or more (since October, 1975).

3. The formulation of a committee with representatives from the Ministries of Education, Welfare, Justice and Labour, and professionals from various fields to study the problem of mental retardation in Greece.

4. The preparation and writing of a law on "Special Education" which makes provisions for the education, vocational orientation, habilitation, and rehabilitation of all exceptional children. This law was drafted by the cooperation of the Ministry of Education, Welfare, Justice and Labour.

CONSTANTINOS J. TSIMPOUKIS received a Teaching Certificate in Elementary Education, with supportive work in Literature and Philosophy (1952-1954); Diplome from University of Athens in Elementary Education-Educational Psychology with supportive work in Literature, History and Sociology (1962-1964). He attended the University of Wisconsin-Milwaukee under a Fulbright Scholarship where he received a Certificate of Completion in Elementary Education with supportive work in Exceptional Education and Supervision; and an M.S. in Guidance and Counseling (with Minor in Educational Psychology) (March, 1965), graduating Summa Cum Laude. He received his Ph.D. in Counseling and Behavioral Sciences from the University of Wisconsin-Madison (January, 1968). After returning to Greece, Dr. Tsimpoukis worked in the Ministry of Education in different positions such as Research and Curriculum Development Department, Director of Special Education and as a psychologist. He presently is Professor of Education and Psychology in the Graduate School for in-service training of teachers. Has translated several articles and books into Greek. Among these are: S.A. Kirk, *Educating Exceptional Children* (1973); AAMD *Manual on Terminology and Classification in Mental Retardation* (1973); B. Massialas and H. Zevin, *Creative Encounter In The Classroom*. He has written numerous articles, including "Educational Research" and "Mental Health of Contemporary Man."

National Rehabilitation Scheme for The Physically Disabled and Mentally Retarded in Kenya

G. W. Mahinda

Abstract. Facilities for the rehabilitation of the mentally retarded in Kenya include the Jacaranda School in Nairobi, and special units in ordinary schools elsewhere. Normalization and integration principles are utilized, relying mainly on foreign personnel. Future plans include training of local personnel, appointment of liaison officers and placement officers to aid in finding employment for the retarded, the expansion of training facilities at the Jacaranda School, and a survey to identify the mentally retarded population of Kenya, all under the auspices of a pilot project.

Mental retardation is not new in Kenya; it is an old problem as it is in any other part of the world. In 1970, the National Rehabilitation Scheme was introduced in Kenya with the express understanding that both physically disabled and mentally retarded people of Kenya can be re-integrated in the community, where they can be assisted to live normal lives like other members of the community.

It is correct to say that before 1970, the rehabilitation of mentally retarded people was carried out on a small scale mainly in hospitals. No statistics are available to show how many such cases there were. With the introduction of vocational rehabilitation of the physically disabled and mentally retarded in 1970, the Government of Kenya has given priority to the problem of physically disabled persons and has fully subsidized this program. Rehabilitation of mentally retarded persons, on the other hand, is mostly carried out by the voluntary agencies in the country, where government gives special financial grants. Due to insufficiency of human and financial resources, neither of the two programs is fully realized but all efforts possible are being made towards this goal. The speed at which the objectives and goals can be reached depends on resources at our disposal.

The responsibility of rehabilitation of mentally retarded persons rests with the Ministry of Health, Ministry of Education, voluntary agencies and the Ministry of Housing and Social Services which also coordinates the services rendered by the voluntary organizations.

Considering that Kenya is a young country, it would be proper to say that a start has already been made in the direction of vocational rehabilitation of the mentally retarded. In Nairobi city, the cpaital of the Republic of Kenya, there now

exists a special school called Jacaranda. The school caters to the rehabilitation of mentally retarded people, mostly young ones. In the rural areas of the country, the Ministry of Education has special units in ordinary schools. These special units deal with the vocational rehabilitation of the mentally retarded so as to integrate them with the rest of the society through schools.

To achieve this normalization and integration, qualified personnel to rehabilitate the mentally retarded will be necessary. At present, we are relying heavily on personnel from abroad. No doubt, the country intends to train local personnel both in the country and abroad in time.

At Jacaranda School, much assistance is given by doctors with the necessary qualifications to deal with the problem of mental retardation; such doctors give professional assistance on a voluntary basis. The center also recruits clients mainly from the surrounding hospitals. In the same school, the teachers train clients in simple handicraft. The clients concentrate on basketry work, table mats, simple carpentry, etc. It is also the intention to enlarge the school to include further training which would enable the mentally retarded to secure employment in industries in the country. In order to make the exercise possible, the Kenya National Council of Social Services, a voluntary organization charged with coordinating voluntary organizations in the country which deal with social problems, is in the process of training liaison officers. When liaison officers are recruited, their main duty will be to negotiate with both private and public sectors for equal opportunities in the employment of disabled and able-bodied persons.

As you are aware, it is always difficult to plan a program of this nature without the necessary statistics, e.g., the number of people you are planning for. It is therefore necessary to carry out a survey to determine how many physically handicapped and mentally retarded people there are in a given country. A start has already been made in this direction by carrying out such a survey in one of our provinces recently. We intend to continue with the remaining survey as funds become available. At present it is estimated that in a population of about 12,000,000 people, about 800,000 of them are physically disabled and/or mentally retarded.

The identification of the mentally retarded, especially in the rural areas, where about 80% of the population lives, is not easy. There are many problems to be overcome, some of which may be related to people's traditions. It is necessary to educate the population. In this regard, efforts are being made to reach people through the available media of communication. The government and voluntary agencies do occasionally prepare journals on the problem of mental retardation. Officers of the government and voluntary organizations, directly dealing with this problem, get time to speak over radio and television to discuss this subject. It is also correct to say that the President of the country, His Excellency, Mzee Jomo Kenyatta, has been very keen and of great assistance in helping the program. He has personally opened some of the country's institutions dealing with this program. When the population is fully aware of this problem, we hope to receive more assistance from them and therefore, be able to move faster.

In all development projects within the country, government, where possible, encourages local participation. It is therefore necessary to educate the masses to enable them to fully participate and contribute towards the development of the program. Throughout the country there now exist provincial institutions generally dealing with the training of the physically disabled persons. It is hoped that in the course of time it will be possible to establish a section within the same institution to deal specifically with mental retardation and other severe cases. Such units will be sheltered workshops or light industries in the urban area which will provide employment.

In the provincial institutions, it is planned to form local committees to assist in the running of such institutions. The local committee will be made up of local leaders of the area, businessmen, councillors, local politicians, trade union representatives, leaders of the various religious denominations and government officials. Such committees will also assist in assessing employment opportunities in the rural areas, raising funds to supplement government financial assistance, and advising the government on matters concerning the improvement of the program.

Already there is a national rehabilitation committee on physically disabled and mentally retarded. The committee is chaired by an assistant minister as a representative of the minister; the committee is advisory to the government through the minister for housing and social services on all rehabilitation matters.

With the current world inflation which has affected Kenya, it is difficult to establish this program throughout the country. We have therefore been thinking of establishing a pilot project, hopefully with external financial assistance. The project would assist in training the needed local personnel to man the program and in the collection of the necessary statistics. It will also be possible to measure the impact of the program, given the resources. The results of the program will be used to solicit more funds from local and central government. Papers have been prepared and the necessary recommendation made to the government.

Vocational rehabilitation and training of physically disabled and mentally retarded persons is but one aspect of the program. There are other important factors which must be seriously considered if the program is to be successful. Resettlement of the clients is of supreme importance in that the whole program is geared to that. It is the intention to assist mentally retarded persons through vocational rehabilitation and training so that they can live "normal" lives through gainful employment. However, it is important to bear in mind that in developing countries where there is a large local labor force of able-bodied people, coupled with a negative attitude from the employers towards employing the mentally retarded, resettlement is not an easy exercise.

It is therefore necessary to engage the services of qualified placement officers who can diplomatically deal with employers in both private and public sectors. We have already, on an experimental basis, hired the services of a placement officer to deal with the Nairobi area. The officer is on a full program in Nairobi; he visits employers and carries out discussions with them on possibilities of employment and the nature of employment. Through these discussions he aims at creating an atmosphere conducive to the employment of his clients. The services rendered by the placement officer assist the institute in changing the teaching programs so that the training given will conform to the requirements of employers in particular cases.

As mentioned earlier, the services of a placement officer in Nairobi, which is an urban area, are on an experimental basis. We intend, therefore, to extend similar services to our rural areas.

Another factor which must be implemented to complete the exercise of resettlement is follow-up. It takes some time for the clients to settle down in employment and to get used to the new order of things. Follow-up, especially in the early stages of employment, is a necessity. It also helps the client and the employer to understand their responsibilities toward each other.

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degree from the University of Saint Francis Xavier, Nova Scotia, Canada, in Social Development. He has worked in various capacities within the Kenya Civil Service since 1955, starting as a Community Development Officer. As Director of Social Services within a Province, he has worked in five of the eight Provinces in Kenya for periods ranging from 1 to 3 years. He presently holds the position of Principal Vocational Rehabilitation Officer in the Ministry of Housing and Social Services and is Executive Officer of the National Rehabilitation Committee.

Vocational Rehabilitation for the Mentally Retarded in Mexico

Edna Berumen

Alicia Castaneda

Luis Guillermo Ibarra

Abstract. Mexico's National Health Plan, with emphasis on the National Rehabilitation Program, has undergone many changes recently. Where it was once centralized, a Rehabilitation Center now appears in each Mexican State. Other changes have taken place, as Mexico has stressed its concerns and community attitudes towards the disabled.

For the last 10 years Mexico's National Health Plan, which is part of the National Rehabilitation Program, has attempted to:

1. Expand rehabilitation services throughout the Mexican Republic (previously they were concentrated in the Capital City).

2. Increase rehabilitation services to all types of disabled: physical, mental and social.

3. Define rehabilitation using a comprehensive criteria — including medical, special education, working capability and social readaptation methods.

The objectives of the National Rehabilitation Program are to provide a coordination of effort for rehabilitation of the disabled; a National Registry of Disabled; Programs of Prevention of Disability; improvement and creation of institutions; formation and development of personnel; legislation for the disabled; health education programs; promotion of scientific research; and employment for the disabled.

As of 1976, the following goals have been accomplished:

1. A close cooperation with Health, Education and Labor Secretariats and Institutions, as well as international organizations devoted to rehabilitation, has been established.

2. Since February, 1976, the National Rehabilitation Council has as its principal functions the planning, programming and coordination of rehabilitation services in Mexico.

3. The National Registry of Disabled is supported by a compulsory law which obliges the notification of disabled cases.

4. The Prevention of Disability was initiated with activities of Prevention of Blindness and Human Communication Problems.

5. These agencies have been created: the National Rehabilitation Medicine Institute; the National Orthopedics Institute; the First Professional Rehabilitation Center; and 14 vocational services of the Rehabilitation and Especial Education Centers.

The Rehabilitation and Special Education Centers are Institutional Models for comprehensive care of medical, special education and vocational rehabilitation services to physical, mental, human communication and visual disabled. These Centers, strategically localized in the Mexican Republic, serve as coordination organisms of state rehabilitation programs and use the services of multidisciplinary professionals and technicians, as well as their institutions and financial resources. The Institutions are supported by Health and Welfare and Public Education Secretariats as well as State Governments.

6. One hundred-twenty specialists in rehabilitation medicine, 40 specialists in human communication medicine, 60 orthopedists, 100 physical therapists, 80 occupational therapists, 100 speech pathologists, 30 prosthetists/orthetists and 60 nurses in rehabilitation were trained, and more than 3,000 psychiatrists and technicians have taken part in further educational courses.

7. There has been a promotion of a scientific research concerning main infantile disabling problems such as cerebrovascular accident sequelae, hearing impairments and blindness.

8. Orientation of health education programs towards society's acceptance of the disabled has begun, along with community participation in prevention programs of disability and rehabilitation.

9. A Department on Vocational Rehabilitation, the first vocational rehabilitation center and a sheltered workshop have been developed.

10. Since 1973, the new sanitary code of the United States of Mexico, contains for the first time, a chapter on rehabilitation of the disabled. The official federal journal of February 6, 1976, published the Statute on Prevention of Disability and Rehabilitation of Disabled for Physical, Mental and Social Handicapped.

11. The National Rehabilitation Program has permitted the performance of positive and true actions of social justice for the disabled, establishing a basis for a new doctrine toward the solution of problems and making it possible for the disabled to have the opportunity to share, contribute and "enjoy Mexico" as others do.

Rehabilitation Of The Mentally Retarded In Mexico

Out of 1,000 inhabitants, 12.2 suffer from mental deficiency; 75% are mildly retarded; and 25% require special re-

habilitation care, which puts an economic strain on the family.

In an attempt to solve these problems, disability prevention and rehabilitation in the physical, psychological, social, educational and vocational areas have been established.

Disability prevention is being instituted by the early detection, diagnosis and referral to rehabilitation institutions for comprehensive care. Rehabilitation is based upon comprehensive and individual diagnosis with flexibility in the instituted program according to the type and level of mental deficiency.

Our aim is to help the mentally retarded find work according to their physical and mental capabilities, and have them to adapt to socio-economic environment. Placement of employment in private or government competitive labor market of the community, as well as in sheltered workshops, home industries, and private shops are employment goals for the retarded.

The Health and Welfare Secretariat, through its general direction of rehabilitation in coordination with the PanAmerican Health Organization and others, organized a study group for the rehabilitation of the disabled, held in Mexico City in September 1975. The conclusion of this study group is to establish a comprehensive rehabilitation program containing the following points:

1. To coordinate efforts with the institutions related to mental retardation.
2. To improve statistical information regarding prevalence, incidence, distribution and characteristics of our mentally retarded.
3. To improve rehabilitation and special education services to mentally retarded.
4. To promote the establishment of permanent homes for those cases of profound mental retardation.
5. To impel labor capabilities and employment for rehabilitated clients.
6. To train personnel devoted to the rehabilitation of the mentally retarded.
7. To promote the prevention of mental retardation.
8. To promote legislation for the mentally retarded.
9. To develop a health education program in this field.

Vocational rehabilitation of the mentally retarded should have the following characteristics:

1. Close cooperation between training centers and employers.
2. Combined training period and working production to encourage the employee, and to permit a more reliable evaluation.
3. Individual's capabilities closely related to the job, and vice versa.
4. Supervisor not over-protective of the retarded employee; and supervisor developing the best working relationship between the disabled and the other employees.
5. Incorporation of the "Texas Plan" as reference: to provide vocational orientation and social, psychological and educational-cultural skills to the mentally retarded on an early and coordinated educational vocational program.

Each Mexican State (14) now has a vocational training area in the Rehabilitation and Special Education Center.

Further research includes the selection of employment according to the various levels of mental retardation.

The actions taken in the field of mental retardation rehabilitation in Mexico are just the beginning. Our goal for the disabled and all human beings is that the rehabilitation will allow the retarded to experience the same independence and enjoyment of life as others do.

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Institute for Exceptional Children In Peru

Perla Blomberg de Soriano

Abstract. A pilot program in the form of a sheltered workshop is described as the ideal situation for rehabilitation in Peru. Existing social factors such as widespread unemployment and lack of legislation to ensure the hiring of the trainable mentally retarded prevent this from being a widespread solution at this time. A vocational training program would service more clients at lesser cost. The programs of the Institute for Exceptional Children which include vocational training, educational diagnosis, and community education programs are described.

Peru is an underdeveloped country, with many needs, especially in the fields of health and education. In the scope of unemployment and subemployment problems, bilingualism, malnutrition and disorganized family groups, the mentally retarded occupy a secondary place. Tremendous efforts are being made, however, and we are very proud of the accomplishments which have been obtained in spite of major difficulties.

Until 10 years ago, the majority of rehabilitation programs were run by private and non-profit groups. There are special welfare and care laws to protect the mentally retarded. However, in 1972, the government passed the Law for General Education, which includes the following acts:

1. There is no age limit for starting and finishing educational treatment.
2. The mentally retarded will receive care and education at institutes, special schools, or in special classes within regular grades in normal schools, government or private.
3. Continuous evaluations must be done on mental, physical and emotional development to evaluate the advances in training for work and special adaptations.

The law envisions a close cooperation between the Ministry of Education, and the Ministry of Health, so as to

promote diagnostic services for children and orientation programs for parents. It is the first time that legislation has been made on behalf of the mentally retarded. We are sure that the new health law will have a special part concerning mental retardation as a mental health problem.

The application of the present Law for Education is under the direction of the National Direction of Special Education, created in 1970. This office has technical personnel to supervise the work and special services which now exist. During recent years, development in the field of mental retardation is reflected in the number of services now available for these children. In Lima there are now 21 day care centers, 8 of them official or state centers and 13 private ones. In the rest of Peru, there are 20 centers, 6 official and 14 private. There are also special classes for slow learners within some normal school systems. In Lima there are 25 of them. As for diagnosis and treatment services, in Lima there are 6 programs now, 2 state, and 4 privately sponsored.

There is no law to provide economical support for the mentally retarded children; private institutions receive government grants and community help and the state schools are free for everyone.

The Instituto para Ninos Excepcionales is an institution which offers education and specialized training to mentally retarded children and youngsters. At the present time there are 115 children and adolescents of both sexes, with ages ranging from 5 to 28 years. Their levels of mental functioning correspond to the moderate, severe and mild degrees of retardation.

Educationally they are distributed into: 3 classrooms for the educable level, 2 for the trainable level, 1 for the custodial group, 2 pre-vocational groups, and 2 work activities centers for men and women. Each classroom or group is supervised by a specialized teacher and an auxiliary in education, with an average number of 10 children in each group. There is also a technical team which works continuously with the students, teachers and parents. This team includes a neurologist, educational and clinical psychologist, speech therapist, social worker, and specialized teachers.

Although it is a private, non-profit institution, most of the families of the students are not able to cover the real cost of their education, so we receive government help. Most of our pupils receive total or partial scholarships from the Institute or from other private institutions.

The Center offers the following services: educational and academic programs, remedial programs (music, rhythm, corporal expression, speech and psycho-therapy), pre-vocational training, vocational work activities, parents and community orientation, psychoeducational diagnostic service, and professional and university practice. The educational program is directed towards the acquisition of social and personal development, and the achievement of daily habits and skills. In our programs we follow the norms given by the National Direction of Special Education, which approves and evaluates all the programs in special education in Peru.

In our 12 years of functioning, we have accomplished some important steps in vocational rehabilitation. Our older students have received training in the use of some working tools, have developed working habits, and have done various activities in the fields of carpentry, sewing, frame knitting, hand knitting and artisan work. We have also been able to place a few of our students in protected jobs within the community.

With the help of the Patronato Peruano de Rehabilitacion y Educacion Especial, and a Jewish womens institution, we have been able to build a sheltered workshop at our Institute. It will start functioning at a production level next year with the help and equipment of CARITAS Alemania.

Our program has, and has had, as its responsibility and aim, tolerance for a full working day, acceptance of supervision, constructive criticism, good peer relationships, and job adaptability and flexibility, rather than general or special job skills and good work habits. In this program, which provides services to mildly and moderately retarded young men and women between the ages of 15 and 30, the skills are taught in the practical setting of the workshops and in a variety of instructional maintenance and trade services. Each trainee admitted to the program is assessed in every area of functioning to determine his needs in the areas of: living, work academics, socialization, recreation, and medical aspects. The trainees are divided into small groups. A great deal of work is done in the field of local crafts and handwork. As an integral part of the daily activities, there is a recreational program, including gymnastics and other forms of physical exercises.

In the next stage, the pupils will be trained to perform concrete vocational operations in the course of adequate production organization. The primary emphasis will be placed on systematic vocational training and adjustment of the disabled to productive work conditions. The basic rule in the vocational training procedure is to instruct in successive and systematic ways, passing from simple to more complicated operations, demanding various psychic and psychophysical functions.

We think that work must be integrated into the total development of the human being. Men, and surely the mentally retarded, must not be reduced solely to a working being. Other aspects of his personality must be developed; the educator must look further than the sole problem of employment. He must help the mentally retarded towards self-acceptance, prepare him for integration in the social community, and educate him to use leisure time appropriately.

In our actual work, and in our future plans, we have to take into consideration the conditions of our country in relation to the integration of the mentally retarded into regular jobs:

1. There is a lack of adequate legislation to insure the acceptance of the mentally retarded in regular working centers. Only recently is there a law being studied.
2. Another problem is that of unemployment and subemployment of non-specialized workers, which leaves even less space for the mentally retarded.
3. The community is not ready for integration yet.
4. The Ministry of Health does not have a rehabilitation program to favor training and integration.

This is why we think that the sheltered workshop we are building is a pilot project in which we can offer a model rehabilitation program in an ideal situation. However, for the present, in accordance with our socio-economic organization, it is more realistic to have as a goal to try to return our disabled to their family group, well prepared to get along in it with what they have learned, instead of working in small groups in sheltered workshops of expensive functioning. We should consider then a vocational training program which includes a great variety of activities, leading to social adaptation and the development of work habits, so as to give the institution more dynamism and to avoid a large permanence in sheltered workshops, which would become an exclusive service for privileged groups of clients. In this way we could give more training opportunities to a larger group of young men and women and we could use our limited economical resources to better advantages. We could prepare our clients to have small industries which could even function in their homes so they would not have to be with laborers whose cultural background is too limited to allow them to understand and interact with the mentally retarded adequately.

Programs for Community Education

The principal objective of the program for community education is to try to achieve the acceptance of the mentally retarded by the community. A Central Committee for mental retardation has been established to inform the community and inform leaders who in turn will propagate more information to the public. The project consists of three activities per year, each one with a duration of 2 weeks. The activities will be:

1. Lectures on mental retardation, given by prestigious professionals in the field. Among the professionals, there will be neurologists, psychologists, educators, and psychiatrists. These conferences will be open to the general public.
2. Work sessions with small groups of parents, supervised by one or two professionals, so as to establish community leaders who will organize new groups and activities in other parts of the country.
3. The conferences and the results of the group sessions will be published through the mass media.
4. This program has been structured, and will be put into practice by the Instituto para Ninos Excepcionales, with the support of the Ministry of Education, the Ministry Health, and with the Oficina Panamericana de la Salud.

Center of Psychoeducational Diagnosis

The Center of Psychoeducational Diagnosis is a service our Institute has been offering to the community since it started functioning, providing psychological and educational evaluations and orientation to children referred from regular schools because of learning problems or possible low intellectual functioning.

Center of Professional Practice

Due to the specific conditions required in the education of mentally retarded children, and based upon the fact that educators of normal children are not prepared to educate handicapped or mentally retarded children, the Institute had the idea and initiative to give specialized courses for educators; a program of this nature existed between 1966 and 1971. We are now a training center for specialized practice for teachers, psychologists and social workers.

PERLA BLOMBERG DE SORIANO has been the Director of the Instituto para Ninos Excepcionales, a diagnostic center for mental retardation and learning disorders, since 1964. The Institute is a private, non-profit institution which receives support from the government and the community and is connected with Peruvian universities as the training center for teachers, psychologists and social workers. Ms. de Soriano is an active member of the AAMD and has participated in two international panels of the Association's Congress, one in Miami and one in Denver. She represented Peru officially last year (1975) at the 20th Latin American Congress in Mexico. She works closely with the Patronato Peruano de Rehabilitation Educacion Especial as a consultant member. She is also a member of the Committee of the Education of the International Committee of Rehabilitation, New York.

Vocational Rehabilitation and Employment of Mentally Retarded Persons in Invalids' Cooperatives in Poland

Jerzy Malinowski

Abstract. Vocational rehabilitation and employment of the mentally retarded in Poland are concentrated in invalids' cooperatives maintained by the State. Special schools have contracts with the invalids' cooperatives to continue vocational rehabilitation for those mentally retarded persons unable to find employment, unable to go to a special vocational school, or lacking basic education. The invalids' cooperatives maintain sheltered workshops as observation and diagnostic centers, vocational training centers, and permanent employment centers for those not suited to the unsheltered workshop of the invalids' cooperative.

All stages of evaluation, placement, rehabilitation and employment are subsidized by the State Rehabilitation Fund.

The vocational rehabilitation and employment of the majority of mentally retarded persons in Poland are concentrated in invalids' cooperatives. They are, of course, the final link in a system in the whole of the free state care of this group of invalids. The first link of the system is prevention, which is the work of various kinds of institutions, such as pre-marriage advisory centers, special clinics and specialized out-patient clinics of the public health service, and the Mother and Child Institute in Warsaw.

When a child is diagnosed as mentally retarded, his education begins at a kindergarten of a special type. Subsequently, depending on the condition, the child has at his disposal a special basic school or, in cases of more profound retardation, a live-in school. After leaving the basic school, most mentally retarded children attend special vocational schools of various types. A graduate of a special vocational school receives the diploma of a skilled worker. It should be emphasized that the diplomas of special basic and vocational schools do not differ one iota from analogous diplomas of normal schools. It is also worth noting that most special vocational schools possess special contracts with specific invalids' cooperatives on the strength of which the school sends the majority of its graduates for employment to a given cooperative, while the cooperative in question organizes practical sessions in its workshops for 2-3 days a week for the trainees during the entire period of their study at the school.

Invalids' cooperatives also sign similar contracts with many basic special schools. For the final grades of these schools, cooperatives organize special practical courses for trainees who are deemed to be incapable of further studies in a vocational school. The purpose of the courses is to teach the trainees basic habits of work in a group, to train their mental-motoric and manual functions, and to teach the trainees the use of basic tools such as a hammer, pincers, a

needle, scissors and so on. The behavior of the trainees is observed and their vocational usefulness is investigated. After leaving school, the majority of these trainees go to work in a sheltered workshop of the given cooperative.

Passing through the full cycle of this education without any inhibitions, a mentally retarded child completes it when he or she is 16-18 years of age. Until all handicapped and crippled children reach maturity, their parents receive from the state a special cash allowance of 500 zlotys a month.

The next link is vocational rehabilitation and then work, or work without the rehabilitation, which involves, among other institutions, the invalids' cooperatives movement.

The movement has 425 invalids' cooperatives belonging to the Invalids' Cooperatives Union. The cooperatives employ more than 250,000 persons, including nearly 200,000 invalids with various kinds of disabilities. Mentally retarded persons represent 7% of this overall figure. At the end of 1975, invalids' cooperatives were rehabilitating and employing 11,650 mentally retarded persons.

Which mentally retarded persons find their way to invalids' cooperatives most frequently? They are persons who: (a) after special vocational schools, cannot find employment on the free labor market; (b) after a special basic school, for one reason or another did not go on to a special vocational school or were not admitted to it because of their condition; (c) after a live-in school, demonstrate preliminary success in learning simple vocational operations; and (d) represent an insignificant proportion, less than 1%, without any education, most frequently from the countryside.

Like all other invalids, mentally retarded persons are sent to invalids' cooperatives by out-patient invalids' vocational advisory centers of Voivodship Offices. They must be classified in one of the three categories of invalidism by Commissions for Invalidism and Employment of the Social Insurance Society. These persons are sent either directly to an invalids' cooperative or, in more difficult cases, to an out-patient invalids' vocational counselling center of Regional Unions of Invalids' Cooperatives. When an invalid is sent to a counselling center, he or she is subjected to a preliminary examination as to his or her vocational usefulness, and sent to an appropriate invalids' cooperative.

Like all other invalids, mentally retarded persons are examined in detail in the invalids' cooperative within the program of vocational rehabilitation advisory activity by the rehabilitation personnel of the cooperative. The rehabilitation personnel of a cooperative consists of a number of specialists, such as a physician, a psychologist, a social assistant, a vocational training instructor, a physical education instructor, a physical therapy specialist and a nurse. The number of these specialists depends on the needs and size of the cooperative.

If the results of the vocational usefulness evaluation are positive, a mentally retarded person is classified for one of four forms of rehabilitation and work:

1. Training in the vocational school run by the invalids' cooperative. There are 11 such schools and their number is quite sufficient, because they are only a supplement to the system of state education.
2. Rehabilitation under conditions of sheltered work.
3. Employment in unsheltered workshops of a given cooperative. This happens most frequently to graduates of special vocational schools.
4. Employment under conditions of home work which is treated as an evil necessity for a number of mentally retarded persons, permitting them to earn their livelihood and to learn simple productive operations under the guidance of their parents and the periodical supervision of a travelling vocational instructor from the cooperative. It should be borne in mind that mentally retarded persons employed on home work are entitled to all social benefits, just like the normal employees of the cooperative. They participate also in various cultural and educational events organized by the cooperative. The cooperative supplies also a complete work station and means of transport for the raw materials and finished products.

I should like now to deal at some length with sheltered work. It is organized in invalids' cooperatives first of all in the form of special sheltered workshops, usually for persons with physical disabilities, in the form of single work stations or groups of work stations functioning in unsheltered workshops of a given cooperative.

Sheltered workshops for mentally retarded persons are, in an overwhelming majority of cases, specialized workshops, that is to say, they employ exclusively mentally retarded persons. A few of them, especially in small cooperatives, are sheltered workshops of a mixed character, for invalids with various kinds of disabilities. There are 65 such specialized workshops at present. These workshops have programs of rehabilitation and regular employment. The principle is that a mentally retarded person works temporarily in a sheltered workshop, but for a number of them this changes of necessity, into regular employment.

An overwhelming majority of mentally retarded persons engaged by a cooperative pass through its sheltered workshop. Some persons, for example, graduates of special vocational schools, are sent for a short period of time, usually about a fortnight, for observation by specialists. Rehabilitation in a sheltered workshop is intended first of all for mentally retarded persons in a moderate or severe degree, and for those in a mild degree, but with a low level of social adjustment or with more serious neurological disturbances or with an additional disability.

Sheltered workshops employ 30-90 mentally retarded persons. They have their own technical and training service and a partly separate rehabilitation service. The rehabilitation personnel employed exclusively for the use of the sheltered workshop consists most frequently of a physician, a psychologist, a social assistant and a nurse. Other specialists are detailed depending on needs from the rehabilitation personnel serving the entire cooperative.

The stay of mentally retarded persons in a sheltered workshop is divided into three main states:

1. A period of observation of behavior and performance of various productive operations whose purpose is the final formulation of a detailed rehabilitation program. During that period, the mentally retarded persons receive a small remuneration in the form of a regular lump sum.
2. A period of vocational training during which they receive a regular monthly remuneration about three times higher than during the first period. The mentally retarded persons are divided during that period into 10-12 member groups supervised by a single instructor.
3. A period of gaining proficiency in the performance of the productive operations learned. During that period they are paid most frequently for the number of hours actually worked, which amounts monthly to no less than the statutory minimum wage of a worker in Poland. Any losses which the workshop might suffer because of this are covered from a special rehabilitation fund of the cooperative, which is the source of money for the rehabilitation activity as a whole. This fund is made up from tax exemptions granted to the invalids' cooperative movement by the state.

Toward the end of this period, the mentally retarded persons are usually placed on trial on a piece-work system, which is used most frequently in the unsheltered workshops of an invalids' cooperative.

The duration of the separate stages differs, depending on the condition and needs of the mentally retarded individ-

uals. But all in all, the three stages taken together cannot take longer than 2 years. After 2 years at the latest, the rehabilitation personnel adopts a decision as to the further fate of a mentally retarded person, having the following possibilities at its disposal:

1. Employment in an unsheltered workshop of the invalids' cooperative.
2. Employment in a sheltered workshop, which might mean regular employment.
3. Placement of a mentally retarded person at the disposal of social welfare as unsuitable for employment.

Two basic criteria are taken into consideration when a mentally retarded person is classified for employment in an unsheltered workshop of a given cooperative:

1. The mentally retarded person achieves a labor productivity in a given unsheltered workshop, which is regarded as the admissible minimum. Generally, however, the labor productivity must not be lower than 51%. It must be pointed out that labor productivity norms in all invalids' cooperatives are about 20% lower than industrial norms. The working time saved in this manner is used for additional recreational work breaks, examinations and rehabilitation treatment. Losses suffered by the cooperative because of this are also covered from the already mentioned rehabilitation fund.

2. A mentally retarded person must reach a level of social adjustment enabling him or her to work with comparative independence in a group.

Regular employment in a sheltered workshop, on the other hand, is intended primarily for mentally retarded persons reaching an admissible minimum of labor productivity but requiring special care, for example, in view of their low level of social adjustment.

The work of mentally retarded persons in a sheltered workshop starts at 4-6 hours a day and is gradually extended to 8 hours a day. The number of hours earmarked for all types of rehabilitation exercises is successively reduced, while the number of hours earmarked for work increases.

The organization of a sheltered workshop which employs simultaneously newly admitted persons, persons in various stages of rehabilitation and persons employed regularly, must be extremely elastic. This is the most difficult problem. Another problem is the organization and execution of a rehabilitation program for the highly differentiated crew of the workshop. Particularly strong emphasis is placed in the rehabilitation program on physical training and social adjustment. With an eye to this end, we have introduced a number of different forms of work such as clubs, hobby circles, music ensembles, vocal ensembles, sport teams, corrective and therapeutic gymnastics, and rehabilitation camps. We emphasize the inclusion of mentally retarded persons in activities conducted by other generally accessible centers, such as residential settlements or district houses of culture and clubs.

One of our most important tasks for the immediate future is a wider extension of vocational rehabilitation and employment to mentally retarded persons from the countryside. We intend to solve this difficult problem through the construction of hostels for these persons in town cooperatives and through the opening of sheltered workshops in rural areas.

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His research includes: (a) scientific co-direction of research on vocational rehabilitation and social adjustment of mentally retarded persons, commissioned by the United States Department of Health, Education and Welfare within the framework of Polish-American scientific cooperation (published in English): the process and the effects in vocational rehabilitation of mentally retarded persons in sheltered workshops; (b) scientific direction of research on methods of vocational training and social adjustment of mentally retarded persons (a publication in English also within the framework of Polish-American scientific cooperation); and (c) work on the theory and methodology of work samples, which resulted in the publication of a book in Polish: *Wprowadzenie do metody prob pracy (Introduction to the method of work samples)*, Research Centre of the ICU, ZW CRS, Warsaw 1976.

A Mental Retardation Rehabilitation Research and Training Center Program in the United States Of America

Joseph Fenton

Abstract. Three Research and Training Centers of the Rehabilitation Services Administration in HEW are directed to the rehabilitation of mentally retarded children, youth and adults. They are affiliated with the University of Oregon, Texas Tech University and the University of Wisconsin. Although the other 16 Research and Training Centers are primarily concerned with the areas of Medical Rehabilitation (12), Vocational Rehabilitation (3), and Deafness (1), some have also conducted investigations on the multi-handicapping and related aspects of mental retardation.

The Mental Retardation Research and Training (RT) Center concept is an outgrowth of Congress' response to recommendations made by the President's Panel on Mental Retardation in 1962. Emphasis was placed on the urgency for new knowledge and trained personnel to make major strides in assisting mentally retarded persons to reach their fullest levels of social, emotional, educational and vocational competencies.

The RT Centers are designed (a) to undertake research targeted toward the production of new knowledge which will improve rehabilitation methodology and service delivery systems, alleviate or stabilize handicapping conditions,

and promote maximum social and economic independence; and (b) to institute related teaching and training programs, to disseminate and promote the utilization of the research findings, thereby reducing the usual long intervening delay between the discovery of the new knowledge and its wide application in practice.

Additional training responsibilities include increasing the numbers of rehabilitation personnel in fields where acute manpower shortages exist; training rehabilitation research and service personnel; incorporating rehabilitation education into all rehabilitation-related university curricula; and improving skills of rehabilitation students, professionals, para-professionals, volunteers, consumers, parents and other personnel participating in the rehabilitation process. These objectives are achieved through short- and long-term in-service and continuing education programs including seminars, workshops, courses of study, conferences and demonstrations — all for the ultimate purpose of favorably impacting and improving the effectiveness of those services that are assisting handicapped citizens to achieve the most productive life possible.

The Mental Retardation RT Centers are concerned with psycho-social-educational-vocational and behavioral studies to learn how best to help mentaly retarded persons to develop and utilize all their potential abilities to the maximum, achieve independent living competencies, work skills, employment, and social acceptance at home, at work, and in the community.

Each Center has a Regional RT Center Advisory Council whose membership consists of representatives from the Rehabilitation Services Administration Regional and State Vocational Rehabilitation Offices in which the Center is located; also from professional and voluntary rehabilitation agencies, labor and industry, consumers and other related Departments within the University. These Councils not only serve as a mechanism for ongoing communication between the RT Centers and the regional and state rehabilitation program, but also for assurance that the research and training activities are responsive to priority areas of need.

The following briefly describes the research and training activities of the three RT Centers in Mental Retardation.

University of Oregon RT Center in Mental Retardation

The Center at first completed a number of successful basic research projects in learning characteristics and the application of behavior modification principles to the vocational training needs of severely retarded adults. These were followed by applied programs of community adjustment problems. The long-term training program objectives were implemented through the development of graduate level courses and a sponsored doctoral fellowship program. The short-term training program consists of campus seminars and field workshops addressed to ongoing in-service needs of multi-disciplinary practitioners who work with mentally retarded clients in a variety of service agencies.

Research Activities. One of the Center's cores is concerned with the identification and measurement of social and prevocational competencies that are critical to post high school community adjustment of mildly retarded young adults. The Social and Prevocational Information Battery (SPIB) tests were developed to assess the knowledge of skills and competencies needed for employability, economic self-sufficiency, family living, personal habits, and communication. Because these are regarded as important for the community adjustment, the SPIB tests are now frequently used in high school curriculum of work-study programs for educable mentally retarded (EMR) pupils.

Another major research project was a national survey of community residential facilities for developmentally disabled people. The study responded to the issue of the prevention of institutionalization and the reduction of the population in state institutions; it also identified over 600 facilities and gathered basic information regarding source of referrals, program development, resident population, and major problems. Altogether 105 facilities are being studied in depth for an understanding of the operations of community residential facilities and the problems they must overcome to function effectively as an alternative to institutionalization.

The Oregon Center also developed and implemented a planning and evaluation strategy for use by State Developmental Disabilities Councils. In this project, three cyclical activities of planning, influencing, and evaluating were identified, each requiring the collection and management of information. The other components of the strategy — influencing and evaluating — were also outlined, and training materials developed to assist Council members in understanding and implementing their roles. Included among these materials is a 15-minute slide-tape presentation which provides an overview of the entire strategy.

Other listings of this RT Center's studies include, "Community Group Homes for Developmental Disabled;" "The Development and Prescriptive Criterion Measure for Assessing Community Adaption of Mildly Retarded Adults;" "Multi-Media Depiction of the Implementation of Concept of Normalization in Community Residential Facilities;" "Recreational Activities and Opportunities of Deinstitutionalized Retarded Adults;" and "Predicting Rates of Acquisition and Production of Complex Institutionalized Moderately and Severely Retarded Adults."

Training and Information Dissemination Activities. Doctoral fellows from a variety of mental retardation professions participated in a 2-year multi-disciplinary fellowship program which included didactic and practicum experiences as well as an active role in the Center's research and training projects. The major thrust of the training resides in the short-term campus seminars and field workshops. These bring participants to the University for 3 to 5 days of intensive training in a variety of mental retardation related rehabilitation areas. The field workshops, on the other hand, are designed to serve those in-service personnel training needs requested by state agencies at locations of their choice.

Also of significance is the Center's concern for developing methods of evaluating short-term training.

In keeping with the charge to all RT Centers to disseminate rehabilitation information and findings, the Oregon Center staff have produced 85 working papers, 7 monographs, and one book. Approximately 9,500 copies of Center publications were distributed.

Texas Tech University RT Center in Mental Retardation

This Center works productively with its University departments of Psychology, Special Education, Engineering, Business Administration, Speech, and Home Economics, as well as with many agencies in the region and nation.

Research Activities. The Center's research focuses on the development of an empirically-based training program in mental retardation, the rehabilitation of the multiply handicapped, vocational evaluation, and community adjustment and training.

The Empirically-Based Curriculum in Mental Retardation Forms aims to develop better orientation and in-service programs for rehabilitation counsellors through a systematic attempt to determine the job function of rehabilitation personnel in mental retardation, current levels of proficiency, and the content now provided in training programs. Rationale for this activity stems from a study of existing training programs for new counsellors and a literature analysis which indicated that more than 50% of the general field counsellors

felt their professional training was inadequate and much of their in-service training related to policies and procedures rather than to substantive content. With this information, training priorities were established and materials developed which included such areas as problems in parent counselling, level of aspiration among the retarded, employers' orientation to the retarded, and special problems related to minority groups.

In addition to a completed project demonstrating that blind multiply handicapped persons can be trained for productive work, the Center undertook a descriptive incidence study of deafness among the retarded in state and private residential facilities, in cooperation with Gallaudet College and the American Speech and Hearing Association. Preliminary findings revealed (with only 17% of the private facilities responding), that the total population of retarded living in the responding private facilities is 2,372, with 3.2% of this number being classified as deaf and 6.3% as hard-of-hearing. The 81% response from state facilities revealed that they served a total of 104,603 retarded, with 2.4% being classified as deaf and 5.4% as hard-of-hearing; most reevaluate their deaf and hard-of-hearing residents on an annual basis; approximately two-thirds provide a speech and hearing evaluation upon admission: and hard-of-hearing and deaf residents seem to be distributed equally over the age range, except among children under six and adults over 60 where a lower percentage were identified. This probably reflects the difficulty of accurately testing hearing acuity in the very young and among elderly residents. Also, there was not a great variation in the incidence of hearing impairment among the retarded of different mental levels.

The third core area relates to the Development of an Automated Vocational Assessment Battery to provide work skill information in rapidly-prepared and concise reports to vocational counsellors. The instrument is proposed to give the counsellor an overview of the skills usually required, or inquired about, in obtaining employment for the retarded rather than assessments of the social and interpersonal skills usually considered more important in maintaining employment.

The retarded have historically been prepared for jobs requiring large amounts of physical energy expenditure (e.g., lifting, carrying, and pushing) on the basis they they enjoy and have the capacity to perform physical instead of intellectual tasks. Another Center project, therefore, studied the physical work capacities of the mentally retarded. The preliminary results indicate that the retarded have less physical endurance and capacity than average age-mates in the working society.

Several Community Adjustment and Training deinstitutionalization studies were undertaken in which dynamic aspects of the normalization process and the community living alternatives of halfway houses and group homes have and are being thoroughly investigated. In the past 2 years, "The Management of Behavior in Extended Living Facilities for the Retarded" and "Life Patterns of Residents and Houseparents in Group Homes for the Retarded" projects have been completed. Other studies included, "The Evaluatcon of Halfway House Training Programs for the Mentally Retarded," "Factors Underlying Successful Adjustment of Retarded Released from Institutions," "Group Homes for the Mentally Retarded in the Rehabilitation Process," "Group Living for Retardates in the Community: Investigation through Participant Observation," "The Vocational Adjustment Process of Halfway House and Cooperative Work-Study Clients," and "Community Acceptance of Retardate-as-Neighbor: Development of Measurement Techniques and Attitude Change Procedures."

The many observations and findings resulting from the studies are being utilized in the development and testing of guidelines for pre-discharge programs, readiness for community living, placement considerations, needed types of community support and all other elements involved in the deinstitutionalization process.

Training and Information Dissemination Activities. The training effort has been devoted to the area of deinstitutionalization. Conferences attended by rehabilitation and mental retardation staff were held to strengthen the skills of leadership personnel, to enable them to work more effectively with the retarded, and to develop community programs to provide necessary support systems for maintaining the retarded in the community. The conference themes were: Extended Living (Group Homes); Interdisciplinary Programming for the Multiply Handicapped; Developing Social Skills in the Developmentally Handicapped; Protective Services for the Developmentally Handicapped; and Structured and Unstructured Employment of the Mentally Retarded.

Three short-term workshops involved state rehabilitation agency staff development directors who developed a set of RT Center training priorities and the program content for two following conferences. One, oriented toward staff development and supervisory personnel, dealt with cooperative work-study programs. Also, dissemination conferences were held dealing with research underway in sheltered living and vocational evaluation.

As part of its long-term training activities, a group credit rehabilitation research seminar for doctoral level students was initiated to promote competencies and career interests in applied mental retardation rehabilitation research. Staff from nine University departments donate time as guest faculty on a voluntary basis to present up-to-date information on law, architecture, management, food and nutrition, as well as the traditional topics of psychology, education, speech and hearing and other services needed by the developmentally disabled population.

University of Wisconsin RT Center in Mental Retardation

A major emphasis of the Center has been cultural-familial mental retardation within the disadvantaged population group. This was established as a unique focus before the relationship of poverty to mental retardation became a national concern.

Research Activities. A High-Risk Population Laboratory for studies and surveys was established in a city characterized as having the lowest median income, highest population density, highest dilapidated housing rate and according to the school system, the highest number of educable mentally retarded children. This survey research served as a basis for studying the cultural-familial mentally retarded in a large number of disadvantaged families located in an area having the highest known rate of mental retardation. A longitudinal pool of generated data is being continually updated for research to refine the relationship of poverty to mental retardation and the effects of comprehensive family intervention (a) on vocationally rehabilitating slum dwelling retarded adults who generally have not been motivated to seek out, participate in, or profit from the usual rehabilitation resources in the community and (b) to determine whether family intervention is an effective means of preventing consequent rehabilitation problems presented by children who have been reared in high-risk families.

The results from the surveys show that the very high prevalence of mental retardation occurring in the slums of American cities is not randomly distributed but it is contained within a small proportion of families who can be identified on the basis of maternal intelligence. Also, that the probability of a child's IQ falling within a range of 52-67

is 14.2 times more likely if the mother's IQ is in this range than if the mother's IQ is at or above 100. There was a striking concurrence of maternal and paternal IQ supporting the original survey's finding that declining intelligence as age increases is restricted to offspring of less bright mothers. The data showing the concentration of mental retardation among those disadvantaged families where there were many siblings and where maternal intelligence was depressed suggested the need for a total family approach to rehabilitation and prevention of retardation.

Adult women (with a newborn child) with intelligence scores below 75 were randomly assigned to a Control Group or the Experimental (the comprehensive family stimulation) Group. This total stimulation program involved parents and all children residing in the home. The mother received rehabilitation training including (a) remedial academic education, (b) vocational information and counselling, and (c) occupational training as nurses aides, including such areas as housekeeping, janitorial work, food preparation, etc., and (d) general counselling. The infants in the Experimental Group were in a preventive program which included an individualized prescribed curriculum to facilitate intellectual, academic, and social development.

The Experimental children, now averaging over 8 years, show superiority in all measures of development compared to the Control Group. The acceleration of the Experimental Group is in marked contrast to both the test norms and to the progress of Control Group. They have maintained a 30 IQ differential (112 vs 82) and vast advantage on various learning and language measures. The underlying hypothesis of the experimental program was of infant stimulation and prevention of a decline from the norm in rate of development, rather than an acceleration in the rate of development. The Control infants of retarded mothers in contrast appear to be following the expected pattern of development with a gradual decline in measured intelligence as age increases.

The most significant posttreatment performance measure of the Experimental children was in the form of regular class placement for all the children — such placements were previously not typical for groups so socio-economically disposed with measured retardation existing in the family.

The project demonstrated that intervention is effective in the prevention of cultural-familial mental retardation. In the efforts directed toward developing job or employment skills in the mothers and improving home management skills, a number became gainfully employed and others have shown improved homemaking skills; sensitivity to personal and family needs (including nutrition and health); increased receptivity to suggestions from responsible outsiders; and changes in the motivation to seek out, participate in and profit from the rehabilitation resources in the community.

The Laboratory of Applied Behavioral Analysis and Modification is organized around five research and development sections and related supportive services. The section of Instrumentation and Environmental Design maintains the equipment utilized in research and field training projects as well as providing consultation services to rehabilitation agencies in the design and construction of various instruments and systems for use as training or prosthetic components in workshop settings. The section on Remediation of Basic Behavioral Deficits studies evaluating procedures for developing and maintaining high-rate behavior over extended periods of time in the highly distractible, low-motivated retarded adult. The section on development of Work Related Behaviors is concerned with procedures for managing the intra-and interpersonal behaviors of the retarded functioning in a group setting. The section on Behavior Change, Cognitive, Social, Affective, evaluates the effectiveness of various behavior therapy procedures in remediating maladaptive social and emotional behavior patterns in the mentally retarded adult. The section on Utilization of Laboratory Findings in Applied Settings provides consultation to private and public agencies in the design and implementation of rehabilitation programs based on behavior modification concepts.

In addition, a Laboratory of Client, Family, School and Community Variables Related to the Education-Rehabilitation Needs of the Mildly Retarded has been inaugurated to investigate programming processes and practices for the adolescent retarded who are potential rehabilitation clients. Individuals diagnosed as mildly retarded are being assessed in the form of a long-term follow-up study during the phase of client lives which are critical to the vocational outcome variables, i.e., securing a job.

Training and Information Dissemination Activities. Campus Short-Term Training Programs are conducted at regular intervals and during the summer. The field institutes assist state rehabilitation agencies in developing and implementing state-wide institutes dealing with basic information or specialized rehabilitation process topics. The Center Leadership Training program provides indepth interdisciplinary training or full time graduate students in any of the rehabilitation disciplines. Students completing this program qualify for leadership roles in federal, state and local rehabilitation programs for the retarded.

A course, Introduction and/or Orientation to Mental Retardation was conducted on state-wide educational television channels utilizing input primarily from the Center's ongoing research project. It was also used for a series of six field seminars conducted in rehabilitation districts throughout the state and attended by 1,300 professionals and non-professionals on a graduate, undergraduate or audit status.

Publication and Information Availability

Each RT Center has a series of monographs, reprints, audiovisual aids and other training materials available for distribution. A listing of all available publications and further information about the research or training activities may be obtained by writing to the following Centers:

1. Andrew S. Halpern, Ph.D., Project Director, University of Oregon, Mental Retardation Rehabilitation R&T Center, College of Education, 351 Clinical Services Building, Eugene, Oregon 97403.

2. Gerard J. Bensberg, Ph.D., Project Director, Texas Tech University, Rehabilitation RT Center in Mental Retardation, Rehabilitation Counselor Training, Post Office Box 4100, Lubbock, Texas 79409.

3. F. Rick Heber, Ph.D., Waisman Center on Mental Retardation and Human Development, 2605 Marsh Lane, University of Wisconsin, Madison, Wisconsin 53706.

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Assistential Model Based on the Philosophy of Respect for the Human Dignity of the Mentally Retarded Person (AZUPANE) in Venezuela

Gregorio J. Finol

Abstract. The philosophy and methods of the Association Zuliana de Padres y Amigos de Ninos Excepcionales (AZUPANE) are detailed. The treatment, care, and development of the mentally retarded are conducted through programs in sensorial stimulation, motor coordination, corporal expression, social conduct, recreation, an academic program, and remunerative work, emphasizing mobility, language, and interpersonal relationship skills. The total program allows the development of full potential in the mentally retarded.

AZUPANE, a private non-profitmaking Association, was founded on July 13, 1968; its services were open to eight children in the Instituto Educacional AZUPANE. The activities of the Institute are oriented toward the model school. On May 7, 1973, a new orientation in the activities of AZUPANE began, and at the present time in the "Centro de Desarrollo Humano" there are 92 children and adolescents with moderate or serious mental retardation.

In this world of constant and continous change in which modern man lives, AZUPANE affirms its aim of service to the exceptional child in the philosophy of respect for the human dignity of the child. The limiting aspect of the child with mental retardation is taken into account, but from a positive point of view. It is not the limitation as such that is important; it is the human potentiality in evolution that exists in each human being, in spite of certain organic or psycho-affective limitations. A child with mental retardation, however grotesque he may appear to our eyes, however limited he may be in his activities as a free and independent human being, is, and will always be, a human being worthy of admiration and respect and equal to any other person, even to one with superior endowments. His dignity as a human being is never diminished nor altered because of organic malformation or cerebral lesions.

His dignity remains unaltered and he may enter into a dialogue with the world, although his world is limited in space, time and interpersonal relationship. His dialogue is rich in symbolism, and full of human warmth. The dialogue of the individual with mental retardation is a challenge to "normal" man accustomed to a dialogue of linear communication, either in verbal or written language. The language of the person with mental retardation is more global, personalized, visual, totalizing, in which the gestures of the body and each visual reaction are more significant than words of guttural sounds, which probably have no real meaning, but which are full of context in a personal contact and as the expression of a body which vibrates in its communication with the object or the human being with whom he is communicating. We are unaccustomed to this dialogue of the person with mental retardation and instead of accepting and recognizing our own limitations, we ignore the person and take refuge in labels that are nothing more than the expression of our own ignorance. The aim in AZUPANE is to look for the meaning and content of the dialogue with a person with mental retardation, but we have to start by recognizing in all its amplitude the human dignity of the person with mental retardation, without making of the limitation, "the fact of mental retardation," the essence of the human being who is retarded.

The respect for the human dignity of the person with mental retardation implies the recognition and acceptance of his own limitations, his real limitations, but not of those limitations imposed upon him by a discriminatory society which does not accept any deviation from what has been determined as normal, and that supposes a greater emphasis on the limitations rather than on the potential of development. We have to recognize that the right to be himself, to realize his human potential, intrinsic in every human being, is not a favor or a privilege that an elite few concede to the many. The creation of an environment in which this potentiality, scarce though it may be, may reach its maturity, is the true expression of a real respect for the human dignity of a person with mental retardation. This is the task of AZUPANE.

The person with mental retardation has a right to live in the community and enjoy all of its benefits and privileges. There is a sense of urgency to make the community aware of its obligation to provide all the help necessary so that the mentally retarded persons may take part in all the advantages and opportunities that society provides for its members without discrimination or limitation. To take full advantage of these possibilities will depend on the personal choice of the individual, the freedom to choose between alternatives, freely and independently, and finding no barriers in his aspirations that have been imposed upon him by the conscious or unconscious rejection of the community.

The actual objectives of AZUPANE are precise: the scientific study of the problem of mental retardation, the training of personnel to work directly in the specialized field of mental retardation, and the care of the individual with mental retardation.

The scientific study of the problem of mental retardation leads to the investigation of its causes and methods of treatment. This investigation is oriented more toward the prevention than to the treatment and care of the mentally retarded; however, new methods are being found that will make it easier for the individual to realize his potential and easier to integrate the mentally retarded into the community. This method must be analyzed concretely. The realities of communities with different cultural development and socio-economic conditions cannot be put aside in the aspiration to incorporate into that community the person with mental retardation. We cannot adopt the standards of North America or Europe, although we may use their methods and programs of stimulation and work; for the underdeveloped countries, the adoption of these standards would not only be inconvenient but also alienating for the person with mental retardation, for in addition to this bio-psycho-social problem, he will also face the complexity of transculturization, having to live in his own environment with frames of reference entirely different from his own.

The direct action of AZUPANE as a Center of Training and Assistance implies the technical training of the personnel who will work in the field of mental retardation; this personnel is chosen more for the human qualities and abilities in profound and significant interpersonal relationship rather than on actual knowledge of the subject. This training is concerned with the personal action of each one in relation to the mentally retarded person. They must be conscious at all

times of "what" is being done, "why" it is being done and "how" it must be done, which is the first level of training equivalent to a Bachelor's Degree. The second level, besides incorporating all the characteristics previously described, must have as a requisite the supervision of groups of students of the first level; Level Two is the equivalent of a Master's Degree. Finally, the creation of new models of learning, and the fulfillment of certain academic requirements at the level of Universities will earn the Doctorate.

The aims of AZUPANE are definite: to actualize the potential of the individual with mental retardation, slight as it may be. We do not pretend that miracles will take place, but in accepting the reality of the limitations of the individual, we employ all the means available so that the child will reach the degree of personal independence which is possible for him. If the level of independence which he can reach is to smile happily and to express himself through bodily movement or facial expression, that is good, but the assistant must not be satisfied with less than that. There are persons with mental retardation who become economically independent, and that is an important aim, for it means the personal realization of those individuals.

In our institutions the emphasis is the following: to create a feeling of confidence, physical in the sense of personal safety, and spiritual in the sense of emotional balance. Confidence in himself, in the external world, will be the result of a stimulating environment of creativity where all basic necessities, physical and emotional, are satisfied in order to use the internal expression in all of its forms.

There are three aspects of human activity which have priority in the methodology of AZUPANE: mobility, language and interpersonal relationship.

Mobility — movement is the manifestation of life. The repetition of movement internalizes the action, which becomes spontaneous and organized. Motor coordination supposes personal integration and better functional organization of the cerebral centers, in which the sensitive current is transformed into motor current. Every movement has value in itself: the child's fixed glance on an object which he follows with his eyes, his smile, the flexions of his arms and legs, creeping, taking one step, walking, until he reaches more global movements such as swimming, athletics and gymnastics. To move from one place to another independently is the synonym of spatial independence and is the axis of AZUPANE's programs.

Language — means of communication. The spoken word is communication, the spoken word which is personalized in the dialogue-meeting between two human beings who are enriched in their communication and affirmed in their reality of being. Language is the total expression of man's being: language, which is not only a word correctly pronounced, not only an elegant phrase, but the language of total man: gestures, glances, movements of the body, vibrations of the internal ego. This language is charged with the personal contents of man who wants to listen and to be heard. Language is not a repeated mechanization or a therapeutic form, but rather an ambient of trust in an attitude of attention, which understands the internal communication of the individual who is communicating. Language makes the human being a part of all mankind and allows him to communicate with another human being. Through language, the human being structures his personality and is linked with the personality of the others with whom he communicates.

Interpersonal relationship — the individual with mental retardation, by the mere reality of his retardation, is isolated, ignored; his efforts to communicate are misunderstood. The individual with mental retardation has an expression of boredom, a vague look; he is inexpressive. The search for interpersonal relationship is almost an obsession with him, and his infantilism is nothing more than a way of attracting attention and to satisfy superficially his wish to relate to others. Frequently the relationship with a mentally retarded person is functional. He is looked upon as an object that is either cherished or ignored, as an object to scientists who study the causes of mental retardation, as an object to professionals who work with the mentally retarded, as an object to his family who overprotect or reject him, as an object to the community which ignores him or neglects him.

The individual with mental retardation has the same need as any other individual for personal relationship. He needs a personal relationship that makes him feel like a human being and understand himself. He needs a relationship that allows his development and valorization in all of his human dimension. He needs a relationship in which his "I" is confronted with the "I" of the other in a game of intimate approach and moving away a certain distance to see himself reflected in the other, who makes it easier for him to find himself, discovering himself as a human being capable of loving and being loved.

Interpersonal relationship is the natural environment of the activities of AZUPANE in its "Center for Human Development." The most important activity is "how" these activities take place and the total acceptance of the person with mental retardation, looking at him, accepting him as a person in a personal encounter which causes his internal ego to vibrate, in a profound dialogue that needs no words. There he is accepted and confronted in his behavior as a person worthy of appreciation and admiration, as a person who not only in his external appearance, but also in his actions and personal interchange, influences and changes the ego of the other person with whom he is communicating in a totalizing dialogue.

A group of technicians integrates the "Center for Human Development" of AZUPANE. Doctors, psychologists, neuropediatricians, psychopedagogues, social workers and child psychiatrists constitute the Technical Team. This Team periodically evaluates the children at the Center, meets with their parents in case of necessity, and is the most important factor in the professional improvement of the assistants. This Team analyzes the applications for admission, makes the necessary studies, and plans an individual program for each student.

Every application for admission is studied by a social worker who examines all previous evaluations and medical and psychopedagogic diagnoses, besides making a case history of the applicant. The psychologist evaluates the applicant's functioning at the level of mental retardation, using the Gessell Tests, the Hungarian Scale of Development (AZUPANE adaptation) WISC and interviews with the applicant's family. The neuropediatrician makes a clinical examination of the applicant and all the information obtained is analyzed in a general meeting of the Technical Team. According to this initial analysis, the applicant is admitted in the areas judged most convenient for him. In area activities, the psychopedagogue observes the pupil's abilities, and together with the attending assistants a report is elaborated and the P.A.C. Test of Abilities is given to the child, and in certain cases the Reel Language Scale. After two or three months, the placement of the child is reconsidered, and the elaborated programs are confirmed. In certain cases, psychiatric interviews, both individual and in family groups, take place, or complimentary tests are required from the medical services of the community.

There is a periodic reevaluation of the child, at least every 2 years, emphasizing his actual problems and the progress of the program. For these reevaluations, we take into account the opinion of the attendant, who brings a human dimension into the problems of the pupils.

Once the proper environment has been created, both physical and human, AZUPANE elaborates the program of action for the children. We are not concerned merely with "teaching" habits but rather we attempt to structure intelligent human conduct, and this on the level possible for each child. We do not try to teach mechanical behavior, which at best offers a repertory of doubtful value to the pupil, and which finds justification only in the illusory satisfaction of parents or teacher. We do stress the development of the mentally retarded individual and the participation with him in the discovery of new abilities in intimate relation with the world which surrounds and stimulates him.

For this reason, we call the assistential practices "activities." These activities are physical and intellectual but always have real meaning, inserted into human reality, not locked up in experimental cubicles.

In AZUPANE we have no classrooms, nor teachers, although there are rooms set apart for special activities which require a definite setting. The activities take place mostly in the open air, taking full advantage of the luxuriant vegetation offered by our tropical climate — greenery of all shades, flowers and fruit, which give us a feast of colors and savors. We do not turn our backs to this natural spring of stimuli but rather we choose to submerge into it.

The attention of the child is the result of his internal motivation and his interest in the activity presented to him rather than on imposed activity. Thus, the gates of AZUPANE are always wide open.

We work in a circle, face to face, adults and children at the same level, using grass to sit on and natural elements as didactic materials.

Areas of Activity

Sensorial Stimulation. The youngest children from 0 to 5 years, are initiated in the area of sensorial stimulation. We are fully convinced that the earlier a child begins a specially structured program which motivates him, the greater will the opportunities be for the development of his cognitive and behavioral potential.

In the evolution of the child who is initiated in the area of sensorial stimulation, we are always conscious and stress in a special manner the three aims which AZUPANE seeks: mobility (control of the body), language (affirmation of the person who recognizes himself as a human being in a human environment), and interpersonal relationship (the capacity to express himself and to be understood on the plane of affection and intellectuality).

The program is one of attention to the individual child's needs for language, sensorial perception, and motor stimulation. The process of learning perception and representation during the development of the child takes place on a field of interpersonal and social affection of great importance in the formation of psychic structures. The affective field is the cement which synthesizes and joins the perceptive network, the representation and the corporal plan.

The child who is handled correctly from an emotional point of view learns to love himself and accept his body, his vibrations and the world around him. If his mother and others around him accept him as a total person, he will create his own stable and integrated corporal plan.

Motor Coordination. In the area of motor coordination we stress mobility and bodily coordination. The understanding of the corporal plan is not reduced to recognizing the parts of his body; rather, the corporal plan must be the realization of movement as a total entity, and that understanding must be used to integrate oneself to collective activities.

The program includes formation of a corporal plan for conscious control and balance and economical management of the body and breathing exercise. Motor perceptive behavior is taught as training in perception, spatial organization and time structuring. For motor behavior, balance in general and eye-hand coordination are taught. Differentiated psycho-motor training includes training of the hands and preparation for learning and better physical shaping of the child.

Corporal Expression. The area of expression helps the child to understand his development in communication, verbal and non-verbal. Even though the child is well-stimulated verbally in all areas, it is an expression where he "hears himself" at the level possible for him, and understands the demands that are always present, and which will give way to language on more complex levels. This stage is reached through four basic activities: story telling and dramatics, painting and modelling, games, and music. All children between 5 and 10 years of age attend these sessions, and also the "dependent" children who are older.

Painting and drawing enhance attention, concentration and good habits. They lead to an increase in vocabulary and develop self-confidence by means of activities such as the games which precede drawing and painting, with arms, hands, fingers, drawing lines in various directions, passing from the controlled or uncontrolled scrawl to description, matching colors and forms, and later expressing feelings in drawing.

Music gives the child security and self-confidence, helps in his integration with others, and develops auditory perception. It stimulates energy, motor activity, attention and memory through activities such as listening to loud or soft music, vocalizing sounds, singing simple melodies, and eventually taking part in performing groups.

Modelling develops perceptive, tactile and visual capacity and spatial perception, motor coordination and attention, increasing the experiences of the child, giving him security and self-confidence through these activities.

Dramatics and story telling awaken the imagination and experience and depict situations common in daily life, bringing to the child greater self-confidence, expressed through play acting, experiences which he then teaches to younger children.

Social Conduct. The area of social conduct has as its objective the development of interpersonal relationships in the children, who, not having acquired routine habits, see the difficulties beyond the limitations imposed on them by their retardation, such as their integration to society. Therefore, prime importance is given to table manners, personal cleanliness, personal appearance and control of their bodily functions. Each of these activities is considered in its total aspect, which depends on various elements, among which the psychological and psychoemotional are not the least important. We do not aim at mechanized conduct, but rather at the result of acquiring these abilities from the interplay of environment-person, without submitting the child to veritable torture to obtain results.

We provide the child with stimuli through contact with colors, tastes, sounds, noises, forms and sizes. We allow the child to touch, use, manipulate and see all kinds of objects of common usage and help him understand their functions. Understanding his body will allow the child to have a full consciousness of himself, of others, of space and of time. This understanding is realized through rhythmic activities connected with the natural movements of walking, running, jumping, flexing the body, clapping, etc. We aim to stimulate the memory, attention, conceptualization, consciousness of external objects and internal understanding, such as dreams, thoughts, ideas. For each habit we have elaborated a scale of increasingly difficult behavior related with habits, and the form of learning is explained. The habits are: dressing, eating, personal hygiene and discipline.

Recreation. All the children attend activities in the Recreational Area. The program of games combines physical activity with entertainment. Each week all the children go to a swimming pool; providing them with swimming instruction has been one of our most satisfactory programs for water gives the child a different dimension in which to manage his body. Basketball and recently, dancing, complete their activities in this area.

Academic Program. After 5 years of age, and until their departure from the Center, all of the children who show potential for learning are enrolled in academic classes. Perceptual education, perception for reading and writing, and teaching these skills to some of the children are part of the programs. General information is given and the children are encouraged to work in groups, as a preparation for their future incorporation into the community.

We aim to help the group acquire skills and develop their senses through observation, discrimination, classification of forms, sizes and colors, and sounds, representing more and more complicated stimuli; the program includes visits to libraries and art centers. The program is subdivided into: visual discrimination, auditive discrimination, olfactory discrimination and gustative discrimination. Another object is to improve the quality of fine motor coordination, the balance of the body, fine movements; we begin by reaffirming the understanding of the corporal plan in the activities of daily living. It is subdivided into: pre-writing, pre-reading, pre-calculus, reading, writing, and calculus.

The general knowledge program includes a wide spectrum of activities: recognition of patriotic symbols, national holidays, historical sites, cities, the community in which they live, sex education and orientation, and understanding religion and spiritual experiences which may help the individual to serve the community better and to have a happy and full life.

Remunerative Work. The area of remunerative work is the culmination of the process of development which began theoretically in the area of sensorial stimulation. In this process of human development work must be present. The manipulation of objects, their proper use, and the transformation of natural objects are essential characteristics of man's occupation. For the person with mental retardation, work cannot be mechanized or automatized, because of the special characteristics of the mentally retarded person. No one must regard the hiring of mentally retarded persons as a reason for giving them mechanized and routine tasks; on the contrary, this attitude would contribute to their personal alienation. We feel that any task which can be performed by a mentally retarded person must be very simple, within his potential, but total. By this we mean that the person must be able to see and feel the results of his work.

We have included here all the possible tasks which provide learning experiences for the children, beginning with the most simple (cutting with scissors) and advancing as far as possible within the initiative and creativity of the child and of the assistant in accord with the personal interest of the child in the task or activity. This program includes the following tasks: cutting, pasting, mosaic, beading, open work, threading, modelling, assembling, making mats, wood carving, tatting, embroidery, carving, engraving, and knitting.

Manual tasks are oriented to everyday living. The children learn gardening, cleaning, washing cars, plumbing, selling, carpentry, farm labor. The girls also learn cooking, sewing, housekeeping arts, housecleaning, maintenance and care of clothing.

In all the activities the children are both observers and participants; we insist that they not only learn how to do a task but also to acquire basic aptitudes fundamental in a responsible working person: order, cleanliness, safety, honesty, and loyalty. We always have in mind the integrated formation of the child in the development of his personality.

"WE WANT TO BE" is the motto of AZUPANE. This is the cry of liberation of children, adolescents, adults who have the right to live in a society which stresses their REALITY OF BEING and not the limitation of their potentialities.

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PART V

Evaluation Of Vocational Services

The Use of the *PROGRAM ANALYSIS OF SERVICE SYSTEMS (PASS)* Technique in the Evaluation of Vocational Services for Mentally Retarded People

Ron Goodridge

Abstract. A brief introduction to the background of and rationales for the Program Analysis of Service Systems (PASS) and its use as a means of program evaluation and planning is given. Recurring service issues in assessments of vocational rehabilitation programs done to date by means of PASS are discussed. A PASS assessment includes major issues identified by the assessment team, program strengths and weaknesses, and recommendations and priorities for change. PASS evaluations separate and specify service weaknesses in vocational rehabilitation and provide means for planning and monitoring service improvements.

Program Analysis of Service Systems (PASS) was first developed in Nebraska in 1969 by Wolfensberger and Glenn and used only in that state as a means of more objectively allocating funds to newly developed community mental retardation services. A second edition (PASS 2), revised to make it applicable to the broad range of human services, was published in 1973 and received wider exposure through its use in training events across North America. From extensive experience gained through training exercises and actual team assessments, a considerably revised third edition (PASS 3) (Wolfensberger & Glenn, 1975) was published in 1975 and is currently in use.

Prior to the first PASS training workshop in June, 1973, only a few people outside Nebraska were familiar with the PASS technique. Since then, several thousand people in North America, and now others in various nations, have heard presentations or read about PASS. Approximately 3000 individuals have learned how to use it through participating in intensive, 5-day introductory training workshops throughout Canada and in several states of the United States. About 200 people have attended "advanced" PASS training; and about 20 have gained enough training and experience to teach others in the use of PASS.

PASS is fundamentally a technique for external program evaluation. It is based on the principle of normalization as well as other principles of sound human service planning and effective administration. As a means of quantitatively assessing the quality of any human service agency, program, or entire service system, PASS has been used to evaluate many different kinds of services in educational, residential, vocational, recreational, correctional, or counselling services. These services have been addressed to an equally wide range of human problem areas and disabilities: physical disability, sensory impairment, emotional disorder, mental retardation, aging, social disadvantage, delinquency, alcohol, drug addiction, etc.

Because PASS focuses on universal aspects of service quality which are applicable to any type of human service or helping program, it is possible to compare dissimilar services. Also, PASS can document the increase or decrease in quality of a single service over time.

In the assessment of a particular human service program or agency, a team of qualified "raters" familiarizes itself thoroughly with all aspects of the service, drawing upon a combination of written descriptions of the project, site visits, and interviews with clients and key administrative and direct-service staff. Applying well-defined guidelines and criteria, the raters then evaluate the project on 50 "ratings," which are statements about various universal aspects of service, the physical comfort of the service setting, the intensity and relevance of programming, individualization, etc. Each rating is scored by means of a rating scale which has three to six "levels," with the lowest level of each implying poor or even unacceptable service performance, and the highest one implying near-ideal but attainable performance. Each level earns a different number of points, according to the degree of adherence of a particular service characteristic or practice to certain desirable standards and rationales, which are explained in the *Field Manual*. The significance of the ratings is not indicated by the order in which they occur on the score

sheet, but rather by the scoring weights assigned to them. Those ratings which carry the highest positive and lowest negative scores are the most important. For instance, the largest weight assigned to any rating is 40 points (which can mean +40 on the high side, or −40 on the low side) for the rating "Model coherency." This is followed closely by "Socially integrative social activities," and "Intensity of relevant programming," each with a range of +39 to −39 points.

The highest attainable score for all ratings combined is +1000; the lowest is −947. A score of 0 (either overall, or for a specific rating) reflects a "minimally adequate" level of performance, while anything below 0 is considered to fall into the "unacceptable" category. Thus, when a rating is reported as being at a "minimally adequate" level, it means that the score for that rating was 0. A total score of +711 is the "expected" level of performance for any human service. Sometimes, high scores in one element may be balanced out by low scores in another, and a system with some outstanding features may still receive a low or even negative score because of major shortcomings in other areas.

When the demanding criteria of PASS have been applied, most human services have been closer to a minimally acceptable (0 points) than to expected level (+711 points) of performance for two major reasons: (a) PASS judges services according to optimum standards: standards which are near-ideal, but which are by no means impossible to attain. Thus an agency which simply does what most other agencies are doing, without going beyond current mainstream practices, and without incorporating the knowledge already available at the frontier of the field, will not rate very high on PASS. Also, services which have been highly competent and/or innovative will only continue to score high if their initial vitality and momentum are maintained over time in many of the higher-weighted rating areas. (b) PASS also rates a service according to its quality, rather than according to the quantity of service which it delivers. On this basis, PASS is different from many other evaluative instruments. PASS is not concerned with how many people an agency or service system manages to accommodate. Rather, since it is based largely on the principle of normalization, PASS credits services for the degree to which they create normalizing environments for, and positive social interpretations of, their clientele. Many human services attempt to serve large numbers of people, often in a central facility and are not, or are only partially, oriented to social integration of the clients, as required by the normalization principle. Thus, although most human services do perform some service to their clientele, the quality of that service is often only a fraction of what it conceivably might be.

Where shortcomings do exist, PASS makes no allowance for the cause of, or reason for, these shortcomings. Thus, it asks "what," and not "why," and weaknesses lose credit points no matter how reasonable the cause (e.g., bad laws, unfavorable location, lack of funds). The "why" must be considered in understanding the history of an agency, and in charting a course of action, but not in describing or evaluating the current reality. This approach is taken in order to objectify assessment, be able to compare different types of services with each other, and prevent compromises from being reinterpreted as ideals — as is often the case soon after a compromise is made.

PASS was intended and has proven to be much more than an evaluation technique. In addition to evaluative criteria, PASS also provides concrete guidelines and serves as a useful "check-list" for planning new services or for improving existing services. Additionally, PASS can be used in many instances to evaluate programs which are in the planning or proposal stage.

Initially, PASS was designed to serve simultaneously and equally as a tool for service assessment and for training personnel in the principle of normalization. Here, perhaps, lies PASS' greatest current utility. Many human service planners, administrators, and workers have come to comprehend the complexity and subtlety of normalization for the first time after an intensive exposure to PASS. It is mainly a consequence of PASS' intent to "teach" normalization thoroughly and consistently that efforts are made to ensure that those who apply it in any "official" way have received extensive training in its meaning, rationales and use. So far, PASS is not self-teaching, because potential raters have to work through and internalize the intent of the normalization principle before they can learn to apply PASS reliably and consistently. However, a thorough reading of PASS, especially the *Field Manual*, could provide a person with sufficient background to use it in service planning or for informal, "internal" service appraisal.

In the context of any discussion of PASS, a brief exposition of the normalization principle itself is appropriate and often necessary. A full 734 of the theoretical maximum of +1000 points a service might conceivably attain on PASS are related to how well the service meets the criteria and ideals of normalization. This principle is thoroughly explained in the textbook on that topic. PASS "breaks down" or "operationalizes" the principle into its practical human service implications; but while it provides more details in some respects, it does not cover the principle as globally as does the textbook.

To summarize briefly: the principle of normalization is a relatively recent ideology and derives from Scandinavian human service practices of the 1950's and 1960's. Its initial application in North America was to the field of mental retardation. However, it is now being increasingly applied to other fields of human service involving handicapped or disadvantaged persons who have been traditionally perceived as different and devalued (seen as "deviant") by society. The approach of normalization is to assist and/or allow persons to achieve a normal pattern of life, to achieve fuller participation in conventional community services, to secure the opportunities, rights, benefits, recognition, acceptance and valued status of citizens of dignity and worth. This is the goal of normalization. However, normalization also implies that the means to that goal be typical of our culture and as appropriate as possible so as not to attract attention to persons with special needs, thereby further reinforcing their perceived differentness.

Normalization is a conscious, explicit, systematized, operational and optimistic ideology. It is concerned with and seeks to promote devalued persons' social integration and social acceptance. It is concerned with the ways people are interpreted to other citizens, e.g., how they are labelled and talked about. Normalization seeks to accentuate similarities and commonalities with fellow citizens and peers, rather than differences and stigmata. Normalization focuses on potential, rather than past lack of performance, and implies that human service managers should have a positive orientation to and high expectations for the devalued person's development and capacity to learn and grow.

Normalization, therefore, provides a positive and implementable set of ideals for a service and specifies the service goal. PASS furnishes practical guidelines for means and methods of reaching that goal.

PASS is not "traditional program evaluation" or a design for "evaluative research." Carol Weiss (1974) makes a distinction between "alternative models of program evaluation." One such model, according to Weiss, is a "social experiment," which is true experimental research and is governed by control conditions and before-and-after measurement. Examples may include experiments in guaranteed annual income, negative income tax, health insurance, etc.

"Traditional program evaluation," Weiss' second model, is a catchall term to describe methods used to study ongoing programs. These essentially involve before-and-after assessment of the extent to which programs are achieving stated objectives, without any form of control group or conditions. PASS seems to fit best in Weiss' third category of "accountability systems." PASS was designed to contribute to greater accountability in human services in a number of ways by providing a means for objectively and quantitatively assessing programs according to universal standards of service quality; by comparing services over time and by comparing dissimilar services.

PASS is not a method for evaluating an individual's performance or potential, whether that individual be staff or client. Stated more simply, PASS is not a measure of traditional service "outcomes." PASS is primarily concerned with assessing "processes" which human service agencies apply to their clients as opposed to traditional outcomes (or what might be called "processes emitted by clients"). It is possible to debate both (a) the merits of "process" versus "outcome" evaluation, and (b) what in fact actually constitutes an "outcome." This paper is not the appropriate place to debate either of these points. For now it is sufficient to say that one of the basic assumptions underlying PASS is that the processes which a service applies to its clientele are as important as what results from the service. Therefore, PASS looks at service policies, structures, practices, interpretations, etc. and assesses both (a) how these directly affect the client's experience and (b) how these indirectly interpret the client to other people (the larger public and society). Many of the universal human service *desiderata* with which PASS identifies and which are embodied in ratings are simultaneously "processes" and "outcomes." For example, one service characteristic assessed in PASS is "Socially integrative social activities." As one of the most important and heavily-weighted ratings in PASS 3, this rating assesses the extent to which a handicapped person is meaningfully integrated with and accepted by his non-handicapped peers. The activities, supports and structures which the service undertakes or provides to facilitate the person's integration really constitute a "process of social integration;" and this process is also evaluated via this rating.

PASS is not, nor have its authors or proponents ever claimed it to be, a perfect or all-inclusive evaluation method for all aspects of a single service or system. PASS is primarily a method for external program evaluation. PASS itself rewards (or penalizes) a service for its utilization (or failure to utilize) other means of both internal and external assessment at all levels (client, staff and program). A specific PASS rating, "Program evaluation and renewal mechanisms" takes this into account.

Some Recurring Issues in Vocational Programs

A very conservative estimate would place the total number of team assessments done to date (1973-1976) with PASS 2 and PASS 3 at somewhere between 500 and 600. (This does not include assessments done in Nebraska with the first version of PASS.) Many if not most of these assessments were training or practicum evaluations conducted in connection with training workshops. Based on this author's fairly considerable experience with and knowledge of PASS utilization across North America, another conservative and very reasonable estimate would be that approximately 20% of these assessments were conducted on vocational programs.

The one major piece of research done to date on PASS tends to substantiate this latter estimate. Flynn's monograph *Assessing Human Service Quality With PASS 2: An Empirical Analysis of 102 Service Program Evaluations* (1974) included a sub-sample of 22 vocational services. Flynn's further research (unpublished) on an expanded sample of 151 services includes a sub-sample of 31 vocational programs.

Based on experience and knowledge to date, it is possible to point to definite recurring issues in the PASS assessments of different types of services and services to different disability groups. This is indeed possible with respect to vocational programs for mentally retarded people; and the remainder of this paper will identify and discuss briefly several of these issues.

What emerges from a typical PASS assessment is a lengthy, detailed written report which usually presents findings in terms of the following outline:

1. The overriding or major issues, or major concerns about service quality as identified by the assessment team;
2. Program strengths according to the criteria contained in PASS (ratings);
3. Program weaknesses according to PASS criteria;
4. Recommendations and priorities for change.

The overriding issues may be identified in terms of one or more single, important (and usually heavily-weighted) ratings; or in terms of a "cluster" or group of related ratings.

In PASS assessments of vocational services for mentally retarded people, four issues which tend to recur are these:

1. A lack of program intensity and relevancy; i.e., vocational programs tend to be non-challenging and non-(real) work-like;
2. A lack of specialization and of a coherent model; i.e., vocational programs generally tend to confusingly, inappropriately and ineffectively mix training, sheltered employment, "educational" functions, and counselling together in one program;
3. A general age-inappropriateness; i.e., program structures, practices, activities, routines, etc. tend to interpret clients as younger and less capable than they are;
4. A lack of comprehensiveness in the area of vocational services generally; i.e., vocational programs tend to operate in an isolated, uncoordinated, non-systematic fashion so as to produce discontinuity for clients who may need or want to move on in terms of training or employment potential.

Intensity of Relevant Programming

This heavily-weighted rating (point range from −39 to +39) is the most important "clinical" rating in PASS. It assesses both the level and the temporal massing of challenge in terms of (a) whether and to what extent the program meets the service needs of the client, and (b) whether and to what extent the program "graduates" the client along to greater independence or at least more advanced challenges. Secondly, this rating asks "Is the service relevant to the client (regardless of intensity)?"

Many vocational rehabilitation programs have found to be lacking in both respects. After one looks beyond what is often a superficial "busy-ness" in sheltered workshops and other vocational programs, one is frequently struck by the inactivity, lethargy and apparent boredom of clients. Sometimes, one encounters clients who are performing the same or similar tasks day after day, month after month, year after year. Some complicated and challenging machinery (one determinant of intensity) may be present, but it is operated only by a select few clients or only by staff. In short, growth-producing challenge is lacking in many programs on the vocational service scene.

Much of the "work" engaged in by vocational programs is at best marginal in terms of (a) training potential, (b) remuneration for the client, or (c) (additional) revenue-production for the program. Sometimes it is simply irrelevant activity. Much of the simplistic and repetitive "subcontract" work (stuffing envelopes, packaging seeds, etc.) or

the arts-and-crafts activities (ceramics, etc.) engaged in by clients is rationalized on the basis of being "easy to get," "the only thing available" or "what the clients like to do." Much if not most of this "work" bears no resemblance to what would be expected in competitive job situations. It does little to equip clients with the competencies to move on to advanced tasks or eventual dependent or semi-independent employment.

Model Coherency

This rating is the most important, heavily-weighted (point range: −40 to +40), complex and difficult one in PASS. It used to be called "Specialization" in PASS 2 and is concerned with the degree of specialization among a number of variables within a program and with whether these combine harmoniously so as to meet the specific needs of clients. These variables are: (a) client grouping, or whether clients are grouped appropriately in terms of similar age categories and disability levels; (b) the human management model, or whether there is a clearly defined service model (e.g., vocational, residential, etc.); (c) manpower identity, or whether the training and/or experience of staff "fit" the type of job they are doing; (d) program content or what is being done in the program; (e) program process, or how it is being done. Another way to draw the issue is to ask: Are the right people working with the right clients, doing the right things, using the right methods, and consistently so?

Recurring problems which affect the coherency of vocational programs for retarded people can be identified in relation to all of these variables. (a) Vocational as well as other types of programs for mentally retarded individuals frequently attempt to serve a broad group of clients of widely varying ages and levels of ability. This variance is often so broad that a program cannot specialize; it becomes "all things to all people," and thus fails to serve any single group of the clients effectively. (b) Many vocational programs attempt to provide both training and sheltered employment but do so without clearcut objectives and priorities. Often service personnel find it difficult to identify which clients require sheltered employment and which need training (to move on to independent job opportunities). Thus, a confused mixture of "models" is often present in vocational programs. This is compounded by the inclusion in the program of "academic upgrading" or "social/life skill development." These latter services are no doubt required by many mentally retarded individuals. What is being questioned here is the appropriateness of providing these services within a vocational (work) context. (c)hMany of the staff, dedicated and hardworking, to be sure, employed in vocational programs possess training and skills of questionable relevance to the functions of the programs. One would have to question whether a person trained in social work and counselling is the best person to teach an industrial skill (e.g., operating a printing press) to a retarded worker.

These various incongruities directly affect (d) "program content" and (e) "program process." Programs without a clearly defined model and with inappropriately trained or skilled personnel are bound to have and do employ a confused mixture of techniques, methods, approaches, etc. The end result, observed repeatedly by PASS teams assessing vocational services, are programs which simply fail to meet the vocational needs of retarded people: the need to be trained in specific job competencies or the need to have meaningful and rewarding (personally and monetarily) employment opportunities.

Age-Appropriate Interpretations and Structures

A third recurring issue in vocational programming has to do with the group of "cluster" of seven ratings under the general PASS heading of "Age-appropriate interpretations and structures." In North American culture, at least, it is generally more demoralizing to be reduced in age than advanced. This is so in spite of (a) the youth-orientation of our culture, and (b) our increasing tendency to devalue elderly citizens and cast them into a deviancy role.

Numerous examples from assessments of adult vocational programs can be cited to illustrate general age-inappropriateness:

1. Shorter (school-like) days;
2. Child-like furniture and appointments in vocational settings (school desks, blackboards, etc.);
3. Presence of child-like artwork and decorations in vocational settings;
4. Use of "school buses" to transport retarded people to sheltered workshops;
5. Prolonged periods of recreation or non-work activity during the work day (e.g., exercise periods);
6. Repeated references to adult workers as "boys" and "girls" by vocational service personnel.

All of these things can contribute to retarded adults being perceived by the general public as younger and less capable than they are. Thus, these interpretations pose barriers to retarded clients being socially accepted and viewed as productive workers.

Comprehensiveness

This rating is based on a human service planning principle which in turn derives from ideological considerations other than normalization. A full discussion of this concept is beyond the scope of this paper. All that can and need be done here is to list the four components of a comprehensive system:

1. A clearly defined, geographically cohesive, manageable service region;
2. An appropriate regionag population (200,000-600,000);
3. A range of service, wide and complete enough within the region, so a client/consumer need not go outside the geopolitical service area;
4. Effective ("empowered") coordination of services so clients/consumers experience continuity in receiving services.

Within an envisioned comprehensive system of services for mentally retarded people, several major sub-systems can be identified: residential services, developmental (educational) services, vocational services, family resource or support services, and central or administrative services. The vocational system, for example, would need to include a range or continuum of individual services to meet the range of needs among retarded people in a particular region for vocational training, employment or job support.

There are few examples of comprehensive systems of services. Not surprising then is the lack of comprehensive vocational services across North America. Typically, vocational services exist in isolation or in a fragmented service delivery pattern. As a result, retarded people might remain in a job assessment program, or in a sheltered workshop, or in a training-on-the-job (TOJ) placement much longer than necessary because there is nowhere (no service as a "next stop") to go, or because the system is so fragmented that coordination and referral is virtually impossible.

This paper has been intended to highlight several recurring service issues in vocational programs for retarded people. These are by no means the only service weaknesses identified via PASS assessments of vocational services. Nor is it the intent of this paper to imply that all vocational programs have these weaknesses or that there are no positive programs in existence. Indeed there are innovative, challeng-

ing, coherent and dignifying programs in operation. Sadly, experience tends to show these are few and far between.

The above service weaknesses have recurred often enough to be identified as common and major, even overriding, issues facing the field of vocational rehabilitation for retarded people. PASS has served to provide a means to separate and specify these issues. In doing so, PASS might also provide the means for planning and monitoring service improvement in the future in this area.

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APPENDIX

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Seminar Program

Philadelphia, Pennsylvania Phase

Convening of Conference
Dr. Gerald R. Clark, President, Elwyn Institute
Welcome and Presentation of Conference Program
Dr. George Soloyanis, American Association on Mental Deficiency
Welcome from the Rehabilitation Services Administration and Overview of the International Program
Dr. Martin McCavitt, Special Assistant for International Affairs, RSA
The Role of Rehabilitation Services Administration in the Community
Dr. Ralph Pacinelli, Director, Office of Rehabilitation Services, Region III, HEW
Introduction and Statements by Cooperating Agencies:
Mr. Wilbur E. Hobbs, Deputy Secretary for Public Welfare, Pennsylvania Department of Public Welfare
Mr. John A. Hagan, State Director, Pennsylvania Bureau of Vocational Rehabilitation
Dr. Leon Soffer, Deputy Health Commissioner, Philadelphia Office of Mental Health and Mental Retardation
Mrs. Elizabeth Schoenfeld, Director, Developmental Disabilities Office, Region III, HEW
Mrs. Elsie Schmidt, President, Pennsylvania Association for Retarded Citizens
Mr. E. A. Gentile, Executive Director, Philadelphia Association for Retarded Citizens
Dr. Gerald R. Clark, President, Elwyn Institute
"A Program of Administrative Research and Development towards Normalization"
Dr. John McKenna, Ireland
Dr. Marvin S. Kivitz, Chairperson
"The Use of the Program Analysis of Service Systems Technique in the Evaluation of Rehabilitation Services"
Dr. Ron Goodridge, Canada
"Factors Affecting Success of Mentally Retarded in Industry"
Dr. Angelina Boric, Yugoslavia
Dr. Gregorio Finol, Venezuela, Chairperson
"Training of Mentally Retarded Adolescents — Planning for a Changed Attitude"
Dr. Lennart Wessman, Sweden
"Problems of Preparing the Profoundly Retarded to the Community Living Adjustment"
Dr. Henri Bissonnier, France
Dr. Salah-El-Den Hommossani, Egypt, Chairperson
"Overview of Comprehensive Community Based Mental Retardation Services"
Mr. Albert Bussone, USA
"Overview of Group Home Programs"
Mrs. Edythe Ballard, USA
Evaluation of Site Visits
"Sheltered Workshops as a Method of Approach to the Normalization Principle"
Mr. Peter Lennig, Germany
"Vocational Rehabilitation of the Mentally Ketarded in Sheltered Workshops"
Mr. Jerzy Malinowski, Poland
Mr. M. R. Kulkarni, India, Chairperson
"Training the Mentally Retarded for Industrial Work and in Activities for Daily Living"
Mr. Tormod Larsen, Norway
"National Rehabilitation Scheme on Physically Disabled and Mentally Retarded in Kenya"
Mr. G. W. Mahinda, Kenya
Dr. Constantinos J. Tsimpoukis, Greece, Chairperson
"Latin American Goodwill Industries Programs in the Field of Mental Retardation"
Ms. Ines Scioville-Mora, Columbia
"Basic Work Skills, Training and Vocational Counseling of the Mentally Handicapped"
Dr. Edward Whelan, England
Mr. Youssef Karoui, Tunisia, Chairperson
Summary and Evaluation
Dr. John McKenna

Facility Tours
Elwyn Institute
West Philadelphia Rehabilitation Center
Elwyn Institute Center Post Village and Chestnut Hall Apartments
Horizon House Residences
East Mount Airy Neighbors
Ronald Bruce Nippon Apartments

Hospitality
Pennsylvania Department of Public Welfare
Philadelphia Association for Retarded Citizens
American Association of University Women
Elwyn Institute, Food Service Class
Elwyn West Philadelphia Rehabilitation Center Food Services Class

Birmingham, Alabama Phase

Welcome and Overview of the Center for Developmental and Learning Disorders (CDLD)
Dr. Andrew E. Lorincz, Director, CDLD
"Rehabilitation Program — A Behavioral Approach"
Dr. Michael W. Welch, Mr. Jerre W. Gist, Mr. Arthur H. Crotts
"A Multi-Discipline Interdisciplinary Approach to the Evaluation, Care and Treatment of Non-Communicating, Profoundly Retarded Individuals"
Dr. Joan S. Bergman and Project Staff
"Behavior Modification for the Rehabilitation of the Profoundly Handicapped"
Dr. J. R. Sacristan, Spain
"Comprehensive Training Center in Mental Retardation"
Dr. Salah El-Den El-Hommossani, Egypt
Greetings and Official Welcome
Dr. Andrew E. Lorincz, Director CDLD
Dr. S. Richardson Hill, Vice President for Health Affairs, Medical Center, University of Alabama in Birmingham
Mr. Don Garvie, Executive Director, Alabama Developmental Disabilities Planning Council
Mr. Jerry Thrasher, Director, Alabama Department of Mental Health, Division of Mental Retardation
Mr. George M. Hudson, Director, Division of Rehabilitation Crippled Children's Service Alabama State Department of Education

"Vocational Assessment and Training of the Mentally Retarded — A Review of the Program Development at the A.M. Institute of Mental Health"
Mr. M. R. Kulkarni, India
"Vocational Rehabilitation Services in Nandavan Day School for Mentally Retarded Persons"
Dr. Kusum Wankar, India
Presentation
Dr. Samuel Stover, Acting Chairman, Department of Rehabilitation Medicine, University of Alabama in Birmingham
"Report of the Pretest on Attitudes toward Trainable Mentally Retarded Persons and Sheltered Workshops"
Mrs. Marlene H. Rodriguez, Costa Rica
"New Job Opportunities and Placement Techniques for the Mentally Retarded"
Dr. K. Zaki Hasan, Pakistan
"The Caribbean Institute on Mental Retardation as a Vehicle for Change in Rehabilitation"
Mr. Carol Tucker, Jamaica
Presentation
Dr. Gerald R. Bensberg, Director Research and Training Center Texas Technological University, Lubbock, Texas
Summary and Evaluation
Dr. John McKenna, Chairman, Committee on Evaluation and Recommendations Birmingham Phase Committee Members

Facility Tours
Center for Developmental and Learning Disorders
Spain Research and Training Center
Lakeshore Rehabilitation Facility
McCoy Day Treatment Center for the Multi-Handicapped
John Simpson Cerebral Palsy Center of Birmingham

Hospitality
Dr. Joseph F. Volker, Chancellor, University of Alabama System, and Mrs. Volker
Spain Research and Training Centers
Dr. and Mrs. Andrew Lorincz

Washington, D.C. Phase

Convening of Conference
Dr. Edna Berumen, Mexico
Welcome to Washington, D.C. and to the RSA
Dr. Andrew S. Adams, Commissioner, RSA
President's Committee on Mental Retardation — "The Century of Decision" Report to the President
Mr. Fred Krause, Executive Director, PCMR
"The Use of a Group Approach in Rehabilitation of Retarded in Industry"
Dr. Emanuel Chigier, Israel
Introduction to the Fourth International Congress of the International Association for the Scientific Study of Mental Deficiency (IASSMD)
Dr. Michael J. Begab, Program Chairman and President-Elect, IASSMD
"Therapy and Rehabilitation for the Mentally Retarded through Horticultural Therapy"
Mr. Earl Copus, Executive Director, Melwood Horticultural Center
"Human Development Center Program (AZUPANE)"
Dr. Gregorio Finol, Venezuela
"Present State of Vocational Rehabilitation in Peru"
Mrs. Perla de Soriano, Peru
Fourth International Congress of the International Association for the Scientific Study of Mental Deficiency (IASSMD)
IASSMD Congress Sessions
Assessment of Intelligence
Recent Advances in Vocational Training of the Mentally Retarded
Nature of Intelligence-Patterns of Cognitive Processing
Assessment of Behavior in Educable Mentally Retarded
Intervention During Adolescence with Disadvantaged Functionally Retarded Children
Psychological Assessment
Vocationally Rehabilitation and Employment of the Mentally Retarded
Learning and Cognition in the Mentally Retarded
Public and Professional Attitudes Toward the Mentally Retarded
Report from PCMR
Integration of the Mentally Retarded in Society: Progress or Regress?
Use of Pharmacological Agents in Mental Retardation
Behavior Modification in Retarded and Behavior Disordered Children
Prevalence, Treatment and Management of Down's Syndrome
Psychiatric Aspects of Mental Retardation
Special Education for Mentally Retarded
Alternative Patterns of Care for the Mentally Retarded
Social Aspects of Mental Retardation
Mental Retardation in Developing Countries
Adaptive Behavior and Its Assessment: Techniques in Different Cultures
Discussion and Evaluation of the Fourth International Congress of the International Association for the Scientific Study of Mental Deficiency
Washington, D.C. Phase Evaluation Committee Members
IASSMD Congress
Conference Summary and Evaluation
Dr. Gunnar Dybwad, Chairperson
Reports of Evaluation and Recommendation Committees
Committee Members
Final Report of Committee on Recommendations
Dr. John McKenna, Chairman Committee on Evaluations and Recommendations

Facility Tours
Melwood Horticultural Center

Hospitality
Melwood Horticultural Center
Rehabilitation Services Administration
American Association on Mental Deficiency
International Association for the Scientific Study of Mental Deficiency
Naval Academy Band
President's Committee on Mental Retardation